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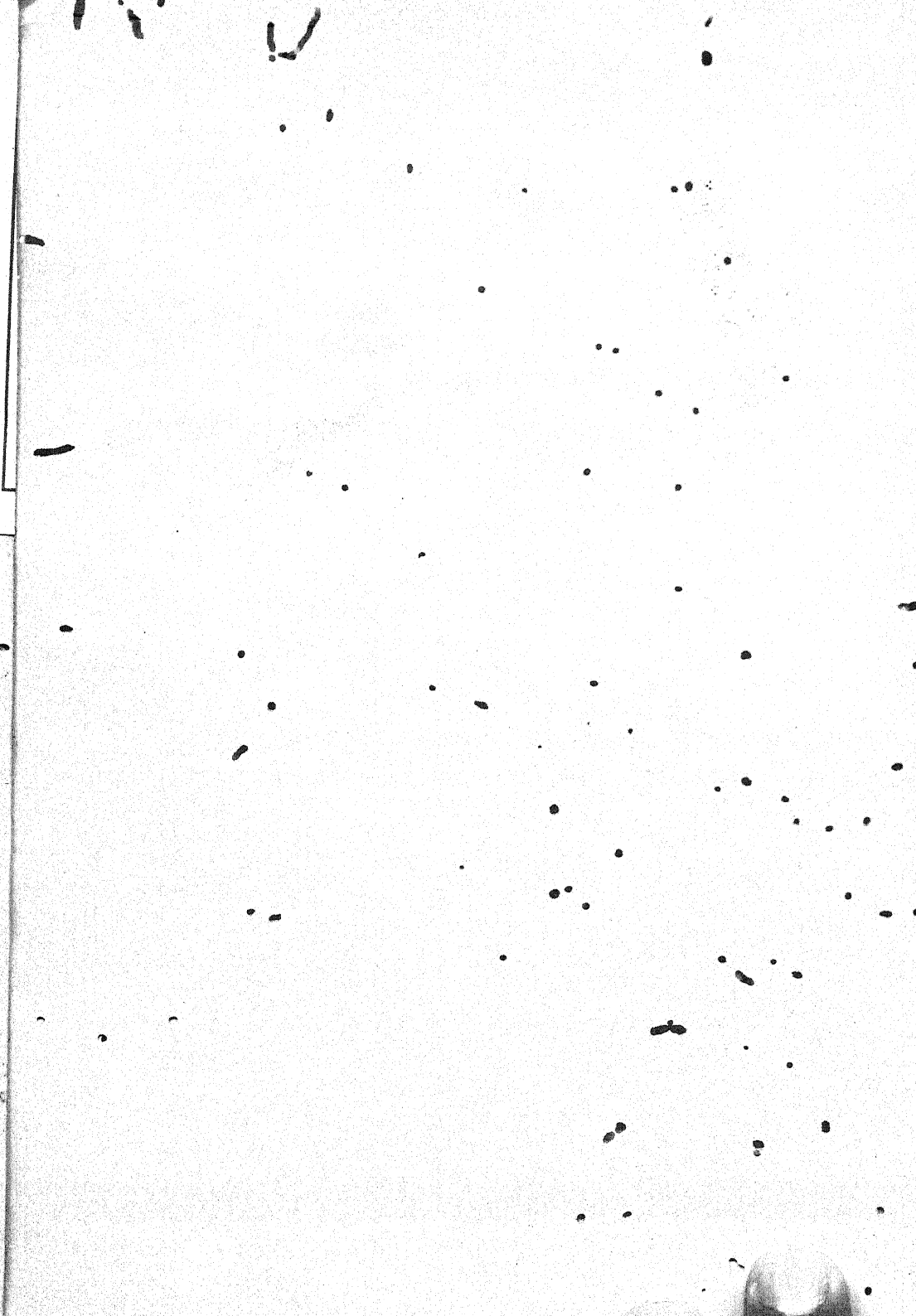


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THE DIRECTION OF WAR
A STUDY OF STRATEGY

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THE DIRECTION OF WAR OF STRATEG

BY
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C.B., C.M.G., D.S.O

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PREFACE

THE principles that govern the direction of war are constant, their application varies with the means at the disposal of a government or commander, and with the conditions prevalent during a campaign.

The exact conditions in which any campaign was fought are unlikely to be repeated, and reliance on the experiences of one war is therefore liable to lead to false conceptions.

In this volume the object, therefore, has been to illustrate the application of principles by examples taken both from recent and more remote wars. While operations on land have primarily been considered, the influence of sea and air power on these operations has also been examined; and since past British experience is likely to be most instructive as regards future British campaigns, the examples quoted have been drawn from British rather than from foreign wars.

W. D. B.

May 1920.

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CHAPTER I

"It is most meet we arm us 'gainst the foe:
For peace itself should not so dull a Kingdom
(Though war, nor no known quarrel, were in question)
But that defences, musters, preparations,
Should be maintained, assembled, and collected,
As were a war in expectation." *Shakespeare.*

THE NATURE OF WAR.

It is generally admitted that the law of the struggle for existence and the survival of the fittest forms the foundation of the relationship between all human beings, and it is in accordance with this principle, therefore, that the relations between individuals and nations must largely be regulated. "The ultimate question," wrote Carlyle, "between every two human beings is, 'Can I kill thee, or canst thou kill me?'"

In the past the collective struggle for existence in its sternest form seems at first to have taken the form of an intermittent contest carried on principally between tribes, or village and urban communities. Finally these contests, or in other words war, became, in the case of peoples who had moved far on the road of that advancement of human society which is called civilization, national matters, and events of comparatively rare occurrence.

In addition to the struggle and competition between groups of peoples and nations there exists, and has always existed, the form of competition between individuals or corporations within a state. This competition although at times equally violent has, however, with the concurrence of the majority of those concerned, usually been governed by certain rules or codes of law, administered and enforced by the will of the people through the medium of the judicial personnel, and supported by the whole civil and military power of the state. And, in this manner, the severity of the struggle for existence within a nation has, therefore, largely been modified and kept within bounds.

No judicial or other tribunal has as yet been set up whose rulings are accepted in disputes between nations, because the

power of enforcing obedience is lacking. Hence, in their vital relations, the struggle for existence is still carried on in its most bitter form, and force, at present but little modified by international agreements, determines the issue. "We are in necessity," exclaimed the German Chancellor in August, 1914, "and necessity knows no law."

War, then, "is a great and persistent fact in the world's history"; and, whatever changes the future may bring, it is at present still the decisive factor in international dealings which appear primarily to be based on the principle that "they well deserve to have that know the strong'st and surest way to get." When differences have arisen it has, therefore, usually been force, or the power to employ it, that has decided the question.

Thucydides remarked that wars have "great causes and little occasions"; and recent wars have certainly resulted from many occasions, such as an insult, actual or fancied, to the national dignity, religious or other persecution of a kindred race, the interests of civilization, or anarchy in a neighbouring state. The real cause has, however, been national rivalry, and there are few modern wars which cannot reasonably be ascribed to the struggle for existence. Strong and capable races, rapidly increasing in population, have, for instance, felt the necessity for consolidating their position by defeating dangerous rivals. Territory held by others less fitted, owing either to indolence or decadence, to rule and develop it has been seized. Nations have gone to war for political reasons with the object of strengthening the state by the incorporation of neighbouring territory inhabited by kindred races; or they have been impelled in self-defence to resist the pressure caused by expansion and increase of strength on the part of other nations; or again, trade disputes and rivalry have caused war.

Causes of
war ex-
emplified

For example, the expansion of Prussia and her claim to the leadership of the German states brought about the war of 1866, when Prussia, with a few of the minor principalities, contested the question of superiority against Austria, Hanover, Saxony and the South German states.

In this war Prussia gained her object, but in doing so inevitably aroused the fears and jealousy of the French, who

were averse to the growth on their eastern frontier of a powerful and aggressive empire which would probably force them to increase the size and cost of their military establishments. As a result France and Prussia, who in this case was supported by the North and South German states, came to blows in 1870, when France was defeated and the German Empire was founded. The war of 1914-1918, between the Germanic nations and their allies and the Western Powers and their associates, was due primarily to German desire for further expansion by force, as explained in the German Emperor's statement that Germany must have a place in the sun and the right to exist.

By annexing the independent state of Texas the United States brought about the war with Mexico of 1845-1848, after which the Americans obtained not only Texas but the whole of the Mexican territories to the west of it, including California. This war is stated by the American General Grant to have been "one of the most unjust ever waged by a stronger against a weaker power."

Again, in 1898 the United States made war against Spain and took from her Cuba, which was in a state of anarchy, and the Philippines, apparently with the object of insuring that a strong European power should not annex these islands. (Map 1.)

The attempted expansion of Russia caused the Crimean War of 1854-1856, the Russo-Turkish war of 1877-1878, and the Russo-Japanese war of 1904-1905.

The history of the events which led up to the Russo-Japanese war is especially instructive.

In about the year 1890 the pressure of a rapidly increasing population had caused Japanese statesmen to consider the possibility of acquiring an outlet on the mainland of Asia; and for this purpose their attention was naturally drawn to Korea, which more than once in the past had been occupied by Japan, and was then inhabited by a somewhat decadent race who were the nominal dependents of the Chinese.

The rapid advance of Russia into eastern Asia, and her occupation of Saghalien and of the Amur province, aroused well-founded fears in the minds of the Japanese lest the annexation of Korea might also be in prospect. Japan accordingly resolved to render herself paramount in Korea.

The Chinese were defeated in the Chino-Japanese war of 1894, and as a result Korea was declared to be independent, the Kuantung peninsula was leased to Japan, and a large indemnity was promised by China. (Map 1.)

These terms were considered so detrimental to the interests of Russia, France, and Germany that Japan was now forced by their combined representations to relinquish her conquests, Kuantung being leased to Russia in 1898, and linked by a branch line to the Trans-Siberian railway running from European Russia through Siberia. Two years later Russia took advantage of the Boxer rising in China to occupy Southern Manchuria for the "protection" of her railway to Kuantung, but in deference to diplomatic representations by Japan agreed to evacuate it. Instead of doing so she began to consolidate her position in Manchuria and to establish posts on the frontier of Korea. (Map on p. 72.)

This policy brought about war, and in 1904 Japan attacked and, having defeated Russia, proceeded to occupy Southern Manchuria and Korea, subsequently annexing the latter.

Of more recent wars that between Turkey and Italy in 1911-1912 was caused by the Italian occupation of the Turkish province of Tripoli. The war in the Balkans in 1912-1913, on the other hand, was the culmination of a prolonged struggle which for centuries had been waged by Bulgarians, Serbs, and Greeks to rid themselves of their Turkish conquerors, and resulted in the Allies successfully asserting their right to independent existence. (Map 2.)

In our own modern history Great Britain conquered Upper Burma, 1885 and 1886, in order to check intrigues of its ruler with certain European powers, which threatened danger to the security of India.

The South African war of 1899-1902, on the other hand, was caused by the ambition of the South African Dutch to form a Boer Republic which would comprise all the territory to the south of the Zambesi, a dream which if realized might well have proved fatal to the British Empire.

Monk's exclamation, in 1665, in regard to the motives for war with the Dutch,—“What matters this or that reason? What we want is more of the trade which the Dutch now have”—goes far to show that the series of wars between the

English and Dutch in the seventeenth century were caused by commercial rivalry. The war between England and Spain which continued from 1739 until 1748 was also due to an embargo placed on British trade with the Spanish South American possessions. Spain claimed, under a decree of a Pope, to be the proprietor of the Spanish Main and South American continent, and on this ground not only refused to the British the right to trade there, but endeavoured, further, to enforce the prohibition by ill-treating British subjects who attempted to carry on commerce in these waters.

Modern wars, therefore, have been made either for what was believed to be national advantage, or in furtherance or defence of national interests; and have primarily been due to the struggle for existence, which, as the population of the world increases, is likely to become more and more intense.

It follows that, until a League of Nations has been set up whose judgments and decisions will be obeyed throughout the world, nations, possessing territory of value, and rights or interests worthy of protection, can assure neither unless prepared to use force. Otherwise they can at best eke out a precarious existence, and must rely for security on the mutual jealousy of other nations, who may not dare to grasp the territory or harm the interests of the weak merely because in doing so they will also prejudice those of the strong. "Just rights?" wrote Carlyle, "What are rights, never so just, which you cannot make valid? The world is full of such. If you have rights and can assert them into facts, do it; that is worth doing!" Function of force

Every nation, then, which aspires to independent existence must at present be prepared to defend in arms, either alone, or in co-operation with others who are also affected, its existence and the vital interests necessary for existence; or to forego these interests and with them possibly the right to survive.

In present circumstances, in fact, political independence and civil liberty are both largely dependent on the possession of sufficiency of armed force. Battle-fields are still "full of veracity; and no head is so thick as to resist conviction of that kind."

It has, however, often been claimed that peace is the

greatest of British interests. Nothing is more true if the phrase is rightly understood, for the word "peace" when used in this sense can only mean peaceful enjoyment of British possessions and trade; and as has been shown peaceful possession does not usually fall to the lot of those who have valuables to lose, unless they are in a position not merely to fight for them, but to fight with more than a reasonable chance of success.

No single nation can command peace, and, until a League of Nations does so, measures should therefore be taken to deserve it by rendering the naval, aerial and military forces so formidable that others will not lightly engage them in conflict. "Let it be well weighed," said the younger Pitt in 1786, "what a security for a lasting peace there is in a defensible and powerful situation, and how likely weakness and improvidence are to be the forerunners of war." Peace is not secured by "ignoble ease and peaceful sloth." Those who "cry peace" will rarely obtain it, unless their military power is such as will enable them to enforce their wishes. When pressed in 1800 to define the real object of the war with France, Pitt at once replied "I do not know whether I can do it in one sentence; but in one word I can tell him that it is security." In similar strain the Duke of Newcastle, who was War Minister, wrote to Lord Raglan before the Crimean War that, without the reduction of Sebastopol and the capture of the Russian fleet it would be impossible to conclude a safe peace; and a safe peace is the object of all war not waged for aggression. "We will not sheathe the sword," exclaimed Mr Asquith, the Prime Minister, in 1914, "...until the rights of smaller nationalities are unassailable, and until the military domination of Prussia has been destroyed."

War is commonly stated to be the most terrible of evils, for even successful war is said to involve the birth of passions, and expenditure of life and of national resources which far outweigh any actual or potential gains.

Moral and
material
value of
war

War, however, possesses this merit, that the victors in the struggle will presumably be those best fitted to survive. "In every particular state of the world," says Bagehot, "those nations which are strongest tend to prevail over the others; and in certain marked peculiarities the strongest tend to be the best." "Warfare among men," also writes Spencer, "has had

a large share in improving their faculties, and has produced an important effect on the development of the arts, and on the formation of the large aggregations which further industrial activities." Great wars, moreover, are often the necessary travail throes of great changes. "Every birth is an agony," said Mr Lloyd George, the Prime Minister, in 1918, "and the new world is born through the agony of the old world," in the great test of war; for as yet no nation has attained greatness until the right to hold high position has been vindicated by force, nor has any nation kept its place when martial spirit has died away.

Much, too, can be urged as to the value of war from an ethical point of view. "There is some soul of goodness in things evil, would men observingly distil it out," and war may be necessary "to diet rank minds sick of happiness and purge the obstructions which begin to stop our very veins of life." Further, "ennobling thoughts depart when men change swords for ledgers," and man is said to be "frail and can but ill sustain A long immunity from grief and pain, And after all the joys that plenty leads, With tiptoe step vice silently succeeds." It may then well not be untrue that man is "trained by war and betrayed by peace."

In 1916 the Prime Minister of the Australian Commonwealth claimed that "The war had done great things for the Empire. Among other things, it had saved it; it had saved us from moral, aye, and physical, degeneration and decay, for he firmly believed we were slipping down with increasing velocity into the very abyss of degeneration. He believed that the principle of the greatness of the Empire had been slipping from us. This war had purged us. . . . There was more hope for us now than ever there had been."

WHO MAKES WAR.

It is a commonplace that every civilized nation possesses a government to which is confided the care of all national rights and interests, and their furtherance by every possible means. In international relations the attitude of a government towards those of neighbouring peoples is termed foreign policy.

Foreign policy is influenced primarily by three factors: the geographical position of national territory, the range of

national interests, and the power and desire of the nation to enforce its rights—for in foreign policy as in litigation both parties invariably claim to be in the right. The first two determine the nations with whom close intercourse takes place, and with whose policy coincidence or divergence of policy is of the greatest importance; the last the nature of the policy, which will generally be daring, energetic, or conciliatory, in proportion to the armed forces at the disposal of the nation; for on the national will as expressed by its military power, and on the policy which must be based on this power, will largely depend the enmity or friendship of neighbouring and other nations.

An aggressive policy, for instance, is certain to arouse fears and resistance on the part of those against whom it is directed, as well as of those who even incidentally may lose by its success, and should therefore be undertaken only by nations whose political and military position is strong. Thus, as stated by Prince Lichnowsky, who was German Ambassador in London in 1914, German "Navy policy and Morocco policy" and "Serbian and Turkish policy" "created the state of feeling out of which the Entente grew," between England and France, in the period before the outbreak of the great war. "The dominant position for which we strove on the Bosphorus, supported by military missions," naturally alarmed the Russians.

On the other hand, too feeble a policy speciously pursued by a nation in the interests of peace may, by encouraging an aggression so serious that it must be resented, defeat its own purpose.

Such, before the Crimean War, was the policy of Lord Aberdeen, of whom Kinglake wrote that :

"He drew down war by suffering himself to have an undue horror of it.... If judges were to declare their horror of justice and make it appear that they would be likely to shrink from passing sentence on one of their erring fellow-creatures, they would invite the world to pillage and murder; but they would be committing a fault less grave than that of which Lord Aberdeen was guilty. He was the chief of the Government entrusted with the forces of the state. To be chary of the use of means so puissant for good and for evil is one of the most solemn charges that can be cast upon man;

but for a ruler to give out that the sword of state will be in his hands a thing loathed and cast aside, is to be guilty of a dereliction of duty fraught with instant danger."

War, then, must be the last resort of policy, the last means by which governments effect the furtherance and protection of national honour, territory, and other vital interests. Since the issue of war must always be uncertain, conflict will as a rule break out only when political or commercial rivalry has reached such a pitch that war becomes preferable to the uncertainty of precarious peace; or when it is felt that even disastrous war will be less harmful to the best national interests than dishonourable settlement.

RESPONSIBILITY IN WAR.

War being undertaken to promote or maintain national interests, the general direction must remain in the hands of the rulers of the nation; who, when there is any choice in the matter, are alone in a position to decide the objects to be attained, and the localities in which the campaign can take place most advantageously from a political point of view, due regard being paid to the naval, military and aerial requirements for the attainment of success. The government, also, is the sole authority that can estimate the extent to which national credit can be pledged and national resources taxed, and how long hostilities can profitably be continued; and it is only the government that can co-ordinate naval, military and aerial operations, and insure the unity of effort which is essential if success is to be gained in war.

The conduct of the campaign on sea, on land and in air should, however, be confided wholly to the naval, military and air commanders, who should not be hampered in the execution of their projects. At the same time, a commander must never fail to shape his measures in such a manner as to further the policy of the government.

The inter-play of political and military responsibility is well exemplified by the dictum of the Earl of Hardwicke in a letter to the Duke of Newcastle during the Seven Years' War in 1760, and by the correspondence which took place between the Duke of Wellington and Lord Liverpool, the War Minister, during the war in the Peninsula, regarding the defence of Portugal in 1810.

Instances
of inter-
action

In 1760 a question had arisen as to the strategical policy to be adopted against the French by the Anglo-German forces serving in north-west Germany under Prince Ferdinand of Brunswick. "Last year," wrote Hardwicke, "the question was whether he should fight a battle. Of that nobody could judge but the general on the spot. But whether the general plan of campaign should be offensive or defensive is a political consideration and to be determined upon a great variety of circumstances, of many of which the King and his Ministers are the most proper judges, though of many others of them the Commander-in-Chief of the army must first determine."

In 1810 the Government had placed an army under Wellington in Portugal, this being presumably in their judgment the locality best suited for its operations, but were anxious as to the safety of the forces in view of the great preparations being made by the French for an advance against them from Spain.

In April, Wellington wrote to the War Minister: "I understand that if there exists a military necessity for it I am to evacuate the country; which means that I am not to be frightened away by a force which I do not consider superior to my own. This means that I have to bring matters to desperation but not to extremities." Subsequently Liverpool wrote to Wellington: "The contest could never be maintained in Portugal through the Winter and Spring if it had not been for the determination of the Government to persevere in it at all risks to themselves.... I am anxious to assure you that we are most fully and completely satisfied with all you have done, and all you are doing. With respect to the expediency of attacking Masséna... we wish you to be governed entirely by your own discretion."

Again, in reply to a request for reinforcements, Liverpool wrote: "We must take our option between a steady and continued exertion on a moderate scale and a great and extraordinary effort for a limited time, which neither our military nor financial means enable us to maintain permanently. If it could be hoped that the latter would bring the contest to a speedy and successful conclusion it would certainly be the wisest course; but unfortunately the experience of the last fifteen years is not encouraging in this respect."

A further example of the responsibilities admitted by Governments in time of war is to be found in a statement by the French Premier in 1917: "Our duty as a Government is simple. In our Generals and the admirable and eager Armies under their command we have a splendid instrument of peace, which has been forged largely upon the hard anvil of war. It is their province in the field of military operations to conceive and to execute the strategic intentions of the Allies; it is ours, as a Government, to control and to see that nothing the Armies may need shall be lacking. The Government is entrusted, subject to the control of the Chamber, with the political direction of the war, and is master of all that concerns the organization and upkeep of our Armies. The Government is the necessary organ to insure, in our relations with the Allied Governments, perfect harmony in the combined action of the Armies. It takes good heed that its prerogatives, which are conditions of its responsibility, are in no way diminished. But when the Government has chosen the chief to lead the troops to victory it gives him complete freedom in regard to the strategic conception, preparation, and direction of operations. It is thus that the Government understands the part it has to play."

The correspondence relating to the decision of the British Government to sanction an advance on Baghdad, in 1915, also supplies an instance of the relations between a government and commander. On the 24th April the Secretary of State for India informed the Viceroy that "In Mesopotamia a safe game must be played," and on the 23rd May in a telegram defining the relations of the cabinet to commanders in the field, it was stated that, "Under present circumstances only the Cabinet should decide questions jointly affecting civil and military policy." Finally on the 23rd October the Secretary of State telegraphed, "If Nixon (the commander-in-chief) is satisfied that the force he has available is sufficient for the operations, he may march on Baghdad."

NON-MILITARY CONSIDERATIONS.

In war, as in every contest involving a struggle of physical powers as well as of the moral and mental forces which support them, the course of operations must often be regulated by considerations which are not strictly military.

In 1797, for instance, Jervis fought a greatly superior Spanish fleet off Cape St Vincent because he felt that England was in need of a victory. After the battle he reported that judging "the circumstances of the war in these seas required a considerable degree of enterprise I felt myself justified in departing from the regular system."

In 1809 it was open to Wellington, who was at Lisbon, either to have attacked the French force, under Victor, which stood near Merida, or that under Soult which held Oporto (Map 8 on page 196). "In the strategic view," says Napier, "to fall on Victor was best.... But Soult held rich provinces, from whence the chief supply of cattle for the army was derived; he had the second city of the kingdom, and was there forming a French party, and the people, troubled by the loss of Oporto, loudly demanded its recovery. To attack Victor it was indispensable to concert with Cuesta (commanding a Spanish force lying to the south-east of Badajos); but he was ill disposed, and to insure his co-operation would have required time, which could better have been employed in expelling Soult." Wellington, therefore, determined to attack the French force which was holding Oporto.

"At the commencement of the campaign of 1810, Wellington also fought the battle of Bussaco because, according to Napier, "he could scarcely expect that England and Portugal would endure a war without palpable advantage to balance the misery and expense." After the repulse of the French, Wellington did not attack them when they manœuvred to turn his position, because "his political position was not secure; his mixed and inexperienced army was not easily handled; war is proverbially full of mischances, and the loss of a single brigade might have caused the English Government to abandon the contest altogether."

After the British victory over the French at Salamanca in 1812, King Joseph Buonaparte, who had been placed by his brother Napoleon on the throne of Spain, abandoned Andalusia and Madrid and concentrated his forces against the British. Marshal Soult, however, was averse to battle "unless upon great advantage. In the disjointed state of their affairs a defeat would have been more injurious to the French than a victory would have been beneficial; the former would have lost Spain, the latter would not have gained Portugal."

The expedition to Salonika in 1915 is a case in which ^{Salonika} military considerations were rightly or wrongly overruled by ^{in 1915} policy. In the autumn of this year the Bulgarians had resolved to throw in their lot with the Central Powers, and, in these circumstances, the Germans decided to crush the Serbians and so open direct communication with Turkey, then hard pressed by the British attack on Gallipoli. (Map 2.) The Serbians could at most put 200,000 men into the field, and assistance could only be given them if the Western Powers passed troops through Greek territory at Salonika, and thence over a mountainous and undeveloped area. Seizing the initiative while the Western Powers were still hesitating as to the course to be pursued, the Central powers concentrated about the middle of September a force of 200,000 troops on the northern border of Serbia, while a large Bulgarian army was simultaneously mobilized near its eastern frontier. On the 28th September the British Foreign Minister made a speech promising "our friends in the Balkans all the support in our power." At this moment the Germans and Austrians were already cannonading the Serbian positions along the Danube, and Bulgaria was waiting only to complete mobilization before declaring war. It was clear, then, as pointed out in a memorandum drawn up by the British General Staff on the 9th October, that the time had passed when effective military assistance could be sent to the Serbians. The Western Powers, however, held to the decision indicated in the speech of the 28th September, which involved the despatch of 300,000 men to the Balkans. Public opinion in England and France demanded that help, however belated, should be sent to our allies, and political necessity dictated to strategy. The Anglo-French troops failed to render material assistance to the Serbians, but a large allied army was retained in and round Salonika; and, as observed by General von Falkenhayn, who was then Chief of the German General Staff, it was considered more advantageous to the Germans from the point of view of the war as a whole, "to know that between 200,000 and 300,000 men were chained to that distant region than to drive them from the Balkan peninsula and thence to the French theatre of war." The allies continued their policy of opposing the Bulgarian forces, and the few German and Austrian troops detached to their assistance, until, in 1918, the sudden

collapse of the Bulgarians, who seem to have been wearied by the length of the war and disheartened by the defeats of their German allies on the Western front, lent some justification to the retention of the troops of the Western Powers in this theatre.

INTERFERENCE IN OPERATIONS.

Non-military considerations, then, form a large item in the broader aspects of strategy, and from this fact may spring the tendency to meddle with the conduct of operations which some statesmen appear to have found difficulty in resisting. During the Crimean war Lord Panmure, the Secretary of State for War, in 1855, even found it necessary to write to Lord Raglan, the British Commander-in-Chief, "...You will find me strictly honest in taking all my own responsibility and backing you and your army....Between ourselves Palmerston (who had become Prime Minister) is naturally nervous for the army and listens too much to people....In short we are all alarmed and insist on sending advice....However, it is easy to make war on paper...."

Other well known examples of this tendency are also to be found in the Civil War in North America, 1861-1865, in the "People's" war in France in 1870-1871.

In the Civil War the Federal, or Union, President Lincoln, and his War Minister, Mr Stanton, undertook too large a share in the general control of all military operations during the first three years of the contest, with particularly disastrous results so far as the fortunes of the campaign in Virginia were concerned. In March, 1864, General Grant was, however, appointed Commander-in-Chief of the armies of the Union. Subject to the general approval of the Government, which was never refused, Grant controlled and co-ordinated the operations of all the troops; and thenceforward the numerical superiority of the Federals was exercised to its fullest effect and advantage, and the issue was never seriously in doubt.

On the Confederate side, although Lee, a most able soldier, was available as Commander-in-Chief, the President, Jefferson Davis, took the conduct of the war into his own hands just at the time when his rival Lincoln had relinquished it in despair. "The results," says Henderson, "appeared in

their usual form, on the Northern side unity of purpose and concentration; on the Southern uncertainty of aim and dispersion."

In the campaign in the east of France and on the Loire in 1871 most of the fundamental principles of strategy were violated by the French Government. In accordance with the experience of the successful wars of the French Revolution the French rightly attempted to achieve success by attacking. On the other hand, the equally important principles of economy of force, concentration of effort, adequate arrangements for maintenance, and rapidity of action, were utterly neglected and with disastrous results. Gambetta and Freycinet, the leading personalities in the Government, were in fact able men, but their previous training had not been such as to fit them for the control of military operations.

Even petty interference in the conduct of a campaign is commonly unfortunate, since the commander is harassed and his attention distracted from his proper duties. In the Crimean War, General Pélissier, the commander of the French army, telegraphed to the Emperor Napoleon III that he "prayed that by His Majesty's orders he might either be set free from the narrow limits assigned to him, or allowed to resign his command"—a command which he described as one "impossible to exercise...at the sometimes paralysing extremity of an electric wire."

It is related of Marlborough that in regard to naval affairs he always knew the limits of his judgment and when to defer to the technical knowledge of those who were experts. The younger Pitt, also, stated that "he felt, as he certainly ought to do, great distrust of his own opinion upon military matters, and that he always stated these opinions with great deference." An army, said Macaulay, has often achieved success under a leader of moderate capacity, but no army has ever prospered under a "debating society." It may be concluded, then, that it is wisest not "to listen too much to people" and then "to make war on paper"; and that in war as in other affairs the proverb holds good, *ne sutor ultra crepidam*.

CHAPTER II

IMPERIAL DEFENCE.

IN military phraseology the word defence is generally associated with an attitude partly of resistance to, partly of reaction against the pressure of an attack.

This conception is, however, widely different from that of national defence, which signifies those military measures taken by nations to safeguard their vital interests, or, in other words, to support and uphold foreign and domestic policy, the aim of which is the welfare of the nation.

The steps taken for national defence should therefore be such as will render both home and foreign possessions, as well as commerce, industries, and other national interests, reasonably secure against aggression.

It is plain that security cannot be assured by a passive attitude under injury; otherwise commerce, which flourishes most when best protected, would languish, and possessions would be lost. National defence, therefore, implies the power and will to resent a wrong, that is, the power to attack, which is the best defence.

This power need not, however, be greater than is required to coerce or assist in coercing potential enemies, should occasion arise, for as a rule there will be community of interest with some nations to set off against divergence of interest with others; and it is seldom that an overwhelming number of nations combine to conquer and dismember one state, as was done with Poland in 1772 and 1795.

The measure of national defence may, therefore, be defined as the provision of armed forces uniformly organized, and not only available for timely employment to secure national territory and interests, but also adequate for this purpose. At the same time the forces should be sufficient to render the friendship of the nation essential to others whose interests coincide with, and its enmity formidable to those whose interests diverge from, the national interests.

It may be that a nation, owing to the smallness of its population, or to inability or unwillingness to undertake

such burdens, may fail to maintain forces adequate either for its own security or to insure the friendship of some nations and prevent the active enmity of others. In such circumstances national existence can, as has been pointed out, continue only on sufferance, or when conflict of interest, or the formation of a League of Nations, impels the more powerful nations to guarantee and respect the independence of small states such as Switzerland and Belgium.

If these principles are applied to the British problem of defence it will be evident that the very foundations of Imperial defensive policy must be, first, unity of organization among and of control over the forces of the Empire; and then the assurance of free intercommunication between its various portions, for, without this, mutual co-operation and support are impossible.

Next in order of importance is the security of British territory, and especially of the centre of the Empire, the British Isles.

Unity of organization and control are best assured by centralization of responsibility, as is the practice in the United States, where the Federal Government exercises complete or practically complete control over the armed forces of the federation.

If this system cannot be applied to the British Empire, unity of organization can be gained only by mutual and voluntary agreement. Unity of action may similarly be attained by voluntary agreement as to the appointment of officers to control and co-ordinate in time of war the operations of the naval, military and aerial forces of the Empire detailed for active operations. Thus Marlborough commanded the allied armies in the Netherlands, in the war of the Spanish Succession from 1702-1712; and Wellington was appointed Commander-in-Chief in the Peninsula, in 1812, of the British, Portuguese and Spanish armies, and in the Waterloo campaign of the Anglo-Dutch-Belgian army. Foch, also, was Commander-in-Chief of the French, British, Belgian and American armies in France in 1918.

Communication between the various portions of the British Empire is maintained principally by means of the sea, and communication can therefore be assured only so long as the Navy is capable of defeating, either alone, or

with the help of the navies of allies, the fleets of those who may challenge British power to control the maritime routes connecting the states of the Empire.

British territory cannot in the last resort be secured except by combined and adequate naval, military and aerial action. It is the function of the land and air forces to assure for the Navy the safety of its docks and harbours, to afford such protection to territory liable to attack from the sea as will allow the Navy freedom of action, and to maintain the security of areas open to attack by land. Further, the army and air force may be required to attack the enemy's naval bases, or to seize and hold portions of hostile territory so as to facilitate naval operations. The Navy, on the other hand, must assure the safe and rapid passage of the land and air forces to any portion of the Empire where their presence is required, and free communication with them subsequently.

The British Empire, however, possesses in addition commercial interests of the greatest importance; and since British commerce, and therefore British policy also, is world-wide, the pursuit of commerce may bring the Empire into conflict with the inhabitants of practically any quarter of the globe. Should such conflicts occur, active measures will be necessary, for commercial rights cannot be protected by a passive attitude. In some cases naval or aerial demonstrations may suffice to attain the desired end, but strong powers can be coerced only by combined naval, military and aerial action, or in certain circumstances by military and aerial operations alone.

The necessity of maintaining territorial and trading interests has generally involved the creation of other obligations, which may be termed political interests, for England has rarely been content to remain in such "splendid isolation" as was experienced towards the close of the nineteenth century. For many years, indeed, the greatest of Britain's political interests was "to hold the balance of Europe in our hands, which, as it is our natural province, is England's greatest security and glory."

"The tranquillity of Europe," said Frederick the Great, "rests principally upon the wise maintenance of the balance of power by which the superior strength of one state is rendered harmless through the countervailing weight of several

states united among themselves. The disappearance of this equilibrium might easily result in a universal revolution, and in the establishment of an enormous new monarchy upon the ruins of those states which were too weak for individual resistance and lacked the necessary spirit for timely and combined action."

Determination to maintain this balance of power seems, for long periods, to have formed the keystone of British foreign policy, owing to the fear lest any nation should acquire so preponderating an influence in Europe as to be in a position successfully to challenge British maritime supremacy. So long as the balance of power was maintained between the Continental nations, all of whom possessed large and vulnerable land frontiers, so long would they be obliged to devote the larger proportion of their expenditure on the maintenance of armed forces to military rather than to naval services.

Great Britain, therefore, generally endeavoured to prevent the absorption of the maritime states of the Netherlands by a neighbouring power. In 1792 the Government declared that it would "never see with indifference that France shall make herself, directly or indirectly, sovereign of the Low Countries"; and in October of this year the Dutch appealed to England for help against French aggression. It was largely for this reason that England was at war with France in 1689-1697, 1702-1713, and 1793-1815, with one year's break. Similarly in 1914 the British declared war against the Germans in defence of the neutrality of Belgium.

The formation of political interests, then, is a means of assuring the protection of the other and more vital interests; and these will vary but little, whether the measures taken for their protection include the maintenance of a balance of power, an attitude of "splendid isolation," or a compact for "the surety of states and general tranquillity of Europe," such as was formed after the defeat of Napoleon in 1815 between Russia, Austria, Prussia and Great Britain, and subsequently France also. Either because of this last arrangement, or as a result of the exhaustion due to the Napoleonic wars, no great conflict occurred until the Crimean war of 1854, which appears to have been waged because England and France considered that the expansion of Russia at the

expense of Turkey would be detrimental to their interests. The formation of a League of Nations as an improvement on the earlier expedients will, therefore, not result in the modification of our vital interests, although, like other political measures, it may be of assistance in their protection.

The sum total of British obligations is, therefore, sufficiently serious, even if it is admitted that much of the Empire is "hedged in by the main," and that at present on certain continents where British possessions are large, and obligations great, the military situation is not unfavourable. For instance, in some cases the frontier marches with those of nations which are not at present formidable in a military sense, viz. Mexico in Central America, and Venezuela and Brazil in South America; China, Siam, Persia, and Afghanistan. In others it is protected by desert, as in the case of Egypt, or by the most difficult mountain range in the world, as on the frontier between Russian Turkestan and Kashmir.

SIZE AND QUALITY OF THE FORCES.

The size and quality of the naval, military and aerial forces which should be maintained to safeguard British territory and interests must, for the present, necessarily vary according to the armed strength of potential enemies and also that of allies and friends.

It is essential, however, that in all circumstances a proper proportion, having regard to their respective functions, should be kept between the naval, military and aerial forces, otherwise Imperial defence will not be on a secure foundation. For an Empire based on the sea free communication by sea, as has been pointed out, essential. The Navy, then, must remain the essential arm, and its strength must be sufficient to insure, either alone or with the assistance of allies, the destruction, for the Navy is primarily an active force, or neutralization of the fleets of those who menace these communications.

As in the case of all nations, the military and aerial forces necessary for the Empire may be divided into two classes, those destined principally for offensive measures, and those required primarily for local defence, and for the purpose of expanding the active forces or of supplying drafts to replace wastage in them in time of war.

Since the power to attack is the best defence, for plainly those who are engaged in repelling effective attacks will be concerned to defend themselves, and not to make diversions, troops and aircraft belonging to the active forces are by far the most important factor in the military scheme of Imperial defence.

Setting aside the question as to the division of responsibility between the various portions of the Empire for providing the forces necessary for active defence, it is evident that their size and quality should be such as to enable them successfully to undertake the greatest obligations likely to fall to their lot; and since "the coming age is shadowed in the past as on a glass," they should apparently be competent to carry to a successful conclusion a war undertaken for the maintenance of the balance of power, or to uphold "the surety of states," as well as and simultaneously with a war for the defence of territory. For instance, in 1813 the British Empire was at war with France in Europe to maintain the balance of power, while defending Canada against the United States. In 1916 the British were engaged in a struggle against the Germans in Europe, and were also obliged to repel a Turkish invasion of Egypt.

The forces required for local defence should equally be of such size and quality as to enable them to fulfil their function of securing the territory where they are quartered, and of maintaining order, until the direct or indirect intervention of the active naval, military and aerial forces can take place in their favour. In other words, the local forces must be competent to meet and check, according to their situation, a diversion made or caused by the principals with whom the Empire is at war, and at the same time, if necessary, to keep order amongst native populations such as those in West Africa and Egypt. They must also be available, if required, for the expansion and maintenance of the active forces.

Were the active forces from the United Kingdom, for example, absorbed in a colonial war, such as the South African war, or in a great struggle for the possession of India, the local forces in Great Britain and Ireland, or Canada and Australia, should, in conjunction with the Navy, be sufficiently powerful to deter other powers from attempting to

take advantage of the preoccupation of the active troops; or, were the Empire engaged in a contest with a first-class European power, the local forces in India should be competent to undertake active operations on the north-west frontier. Or, again, the local forces in the United Kingdom might be required to meet a raid made with the object of relieving pressure in a continental theatre of war, and also to supply reinforcements and drafts for the active armies.

The proportion which the local forces should bear to the active forces will depend primarily on the strength and efficiency of the latter. The greater the power to strike effectively, the more rapidly will war be ended, and the lower will be the total requirements in reinforcements and drafts. Again, the greater the power of striking, the less likely will be hostile diversions and subsidiary operations, or unrest. In the first place the enemy should be obliged to parry rather than given time to deliver blows; and in the second, the victory of the active army would check and stifle any commotion amongst the races under our protection.

It is, however, clearly most important to insure that active naval, military or aerial forces shall not be diverted from their proper function owing to popular nervousness regarding local measures of security. The strength of local forces, therefore, in addition to those required to furnish the reinforcements necessary to keep the active forces at their war establishment, must usually be calculated on a generous scale with regard to their probable obligations. This maxim seems to be especially applicable to the case when the local defence of an island is in question; and the reason may be that as there are no fixed lines of invasion on the sea—such as roads and railways—along which an enemy must advance, an island is apparently—though, owing to the comparative scarcity of suitable landing places, not actually—open to attack from all quarters: further, the active land forces do not, as is usual in the case of continental nations, directly protect home frontiers and territory.

Arrange-
ments for
local de-
fence
illus-
trated

In 1760, for instance, in spite of the decisive victories that had been gained over the French fleets at Lagos and Quiberon in the previous year, the British troops were roughly distributed as follows:

Operating in Canada, Germany, India (Regulars, American Provincials and East India Com- pany's troops)	70,000
German Auxiliaries	55,000
Native troops in India	10,000
Foreign Garrisons	12,000
United Kingdom (Regulars and Militia)	60,000

In 1813, also, when, owing to the maritime preponderance of the British Empire, the British Isles could not have been in any real danger of invasion, the forces of the British were distributed as under:

Active land forces, including contingents	227,000
Foreign corps in British pay	32,000
British regiments in India	28,000
Native troops in India	200,000
In the United Kingdom { Embodied militia, largely used for furnishing drafts for active troops	93,000
{ Volunteers, cavalry	68,000
{ Local militia	304,000

In 1916 after the defeat of the German fleet in the naval battle off Jutland, the relative strength of the land forces, including draft-finding units, in the United Kingdom and on the Continent was roughly as 1 to 2½.

Two instances may be quoted of the disadvantage of allotting a comparatively weak force for local defence.

In the early spring of 1708, the British forces on the Continent, then about 24 battalions and 7 regiments of horse, which under Marlborough had helped to win the battles of Blenheim in 1704, and Ramillies in 1706, against the French, were still in winter quarters, that is, operations had been suspended. In England there were not more than 5000 soldiers, who were mainly recruits, though there was a considerable body of troops in Ireland, amounting to about 15 battalions, besides other units. The French, probably with the object of creating a diversion, now attempted to land a force of 12 battalions in Scotland, where it was hoped that they would attract a large number of sympathisers with the Jacobite cause. Owing partly to the presence in the North Sea of a superior English fleet, partly to inability to obtain pilots who would navigate his vessels into the Firth of Forth, the French admiral was unable to disembark the troops, and after cruising for nearly a month off the coasts of the British Isles abandoned the project. On the first news

of the intention of the French, 12 battalions were temporarily recalled from the Netherlands to assist in the local defence of the United Kingdom, and the English, therefore, apparently acted in accordance with the wishes of the enemy. The troops were, however, able to return to the main theatre of war in time to take part in the year's campaign, and Marlborough's victory at Oudenarde, on 11th July, 1708, put an end to all fears of invasion, thus showing that the best defence is to strike at the enemy, not to parry his blows.

Distribu-
tion in
1862

During the early part of the Civil War in North America, in 1862, the Federal General McClellan submitted to President Lincoln a plan for striking at the heart of the Confederacy, and so ending the conflict, the project being to transfer the bulk of the forces then near Washington, and about 170,000-180,000 strong, by sea to the neighbourhood of Richmond, the capital of the Confederacy. (Map on page 80.) This plan was approved, subject to the condition that no movement was to be made without leaving in and about Washington such force as, in the opinion of the Federal commander, would make the city entirely safe against attack by the enemy; it was also to be secured against a possible rising of the populations of the states north of Washington where many men were in favour of the Confederates. When three out of the four army corps, composing the army of 150,000 men designated by McClellan to advance on Richmond, had landed on the Yorktown peninsula, Lincoln, hearing that only about 20,000 men had been left in Washington, decided also to retain the first corps, 30,000-40,000 strong, near the Federal capital. This ruling naturally changed McClellan's plans in most material fashion, and contributed to produce such doubt and hesitation in his operations that eventually he was defeated.

PEACE STRATEGY.

Strategy may be defined as the direction or management of war; and strategy in peace will, therefore, comprise the management of all national resources so that they may be capable of being exploited not only to the greatest possible extent, but also at the time when they will be most useful, should the necessity for protecting national interests involve the nation in war.

These measures of preparation depend, said the younger

Pitt, "simply and totally on the watchfulness of the administration for the time being," who are the trustees of the nation.

Preparation for war falls naturally into three categories—political; moral and material; and naval, military and aerial.

The political measures include understandings and alliances with other nations when mutual interests coincide, such, for example, as the Anglo-Japanese alliance, under which it is agreed that if either nation is attacked by two powers the other will come to its assistance. They comprise, too, the settlement of matters in regard to which interests clash, such as the composition that was made in the decade before 1914 of the differences between the British and Russians in respect of Persia, and with France in respect of Egypt and Morocco. Diplomatic and monetary support may also be given to small states, such as Afghanistan, whose frontiers march with those of the British Empire, with the object of strengthening their position and stability so that no excuse may be available to justify encroachment or interference by other powers.

Further, the government may endeavour to extend the territory belonging to the nation, whenever this will lead to increased facilities for commerce, or will secure the acquisition of areas likely to be of value as bases of military operations. Thus, when, in 1766, three years after the end of the Seven Years' War, a conflict with France and Spain again seemed possible, the elder Pitt took possession of the Falkland Islands, and directed that Pensacola, in Florida, should be fortified for use as a base of operations in the Gulf of Mexico.

Legislation is required for improvement in the health, physique, and education of the nation, and consequently in its power to compete successfully with other peoples. Commercial prosperity must be fostered in order that the national resources may be so strengthened as to be capable of withstanding the strain of war, when men, goods, machinery, and money, normally employed in commerce and agriculture, will be diverted, and expenditure on naval, military and aerial services largely increased. Taxation also must be so controlled that, while money sufficient for requirements is raised for the civil, naval, military and aerial services, the incidence of taxation may not be so great as to

prove prejudicial to commercial transactions, or to national spirit, for "no people overcharged with tribute is fit for empire."

These arrangements are, however, far from completing the category of what is requisite to insure that national resources may be exploited to their fullest extent in time of war.

The restriction of overseas trade likely to occur on the outbreak of war will tend to throw numbers of men and women out of work, and will raise the price of commodities at a time when a proportion of the people will be least able to bear the increased cost of living. These difficulties should be foreseen and discounted, measures being concerted to regulate, if necessary, the price and distribution of food. Acts of Parliament will be required regulating the press, trade and communication with enemy countries, requisitions, contraband, spying and the treatment of aliens living in the Empire.

In time of war the nation will further be faced with the necessity for largely increased expenditure just when, in consequence of the stagnation of trade, many sources of income may seriously be diminished. The cost of naval, military and aerial services will be very high, owing to the number of men under arms, and to the increased expense of maintaining them due to enhanced prices; also to the large sums which must be disbursed in bounties, pensions and separation allowances, and in the purchase of horses and vehicles, and to the lavish expenditure of warlike stores and material inevitable in war. An important part of peace strategy, therefore, will be to make the arrangements necessary for the provision of funds on economical terms. Some idea of the expenditure involved may be gathered from the fact that during 1917 the British were spending at the rate of £7,000,000 per day. The value of the purchases made by the War Office amounted to £270,000,000 worth of manufactured goods and £113,000,000 worth of raw materials. During the period from August, 1914, to March, 1919, 27,000,000 men, 2,200,000 animals, 500,000 vehicles and 53,000,000 tons of stores were carried overseas.

It is, however, to be remembered that prosperity and money will not command success in war. "Neither," wrote

Bacon, "is money the sinews of war (as it is trivially said) where the sinews of men's arms in base and effeminate people are failing. . . . So are there states great in territory, yet not apt to enlarge or command." It is the moral factors whose influence, with the support of discipline, is decisive; and since the moral value of the armed forces of a people is the expression of the moral value of the nation, it is vital to instil the sense of honour, the love of truth, the spirit of self-sacrifice, the contempt for luxury, characteristics of the greatest importance in determining the result of the struggle for existence.

The naval, military and aerial measures included in peace strategy are not less important than the others, for alliances and understandings, as well as all the commercial and civil undertakings of a nation, are at present founded largely on force. When confidence is felt in national security commerce flourishes, when uncertainty prevails it wanes.

Since the naval, military and aerial measures of peace strategy are based on national policy, the Government must lay down for the responsible naval, military and aerial authorities the general objects to be attained by the policy of the nation. It must indicate the interests to be protected; the localities where potential enemies can be struck with the greatest political advantage, or where assistance may be required by friendly nations; the probable attitude of other nations in the event of war with one or more of the great powers; and the states whose neutrality must be respected or upheld.

The function of the naval, military and aerial authorities is, first, to obtain the most accurate information regarding the nature, climate, coast line, communications, and resources of probable theatres of war, and as to the strength, organization, preparedness, armament, and character of possible opponents and friends; for on this information the strength, organization, and disposition of the national forces must in principle be based.

Estimates can then be submitted in regard to the provision of naval, military and aerial forces sufficient to assure national interests—that is, adequate to carry war to a successful conclusion—and as to the means of intercommunication, such as cables and wireless, that must be pro-

vided so as to facilitate co-operation with dependencies and allies.

In this connection it is well to remember that when moral qualities, discipline, training and armament are approximately equal, superiority of numbers is likely in the long run often to prove victorious even against superior leadership. Since in a great nation numbers of men and machines can be provided, whereas genius cannot be produced as required, the path of safety will consequently lie in ample provision of armed force. Further, it is desirable that the largest possible numbers should be available for the first actions, when success may prove decisive or partial failure involve a long drawn out struggle of endurance.

Of equal importance with advice as to the provision of the national forces is that as to plans for their employment, and then as to their disposition in such a manner that the fleets and troops may be ready when and where required; for the value of force is relative to its position.

Disposi-
tions be-
fore war
exempli-
fied

Thus, in 1845, the Government of India made preparations to meet possible aggression on the part of the Sikhs, the garrisons on the frontier between British India and the Punjab being strengthened, and troops from all parts of India moved to within easy supporting distance of the frontier force. Similarly, before the great war with Germany, the bulk of the British fleet was concentrated in Home waters, owing to the growth of the German navy and the menacing attitude of the German Government; and the Expeditionary Force was organized for warfare in a civilized country with a temperate climate.

Arrangements must be made, however, not only to mobilize and concentrate the necessary forces as rapidly as possible, should war break out—for delay in doing so may permit the enemy to strike the first effective blow, which means so much in war—but, so far as the land and air troops at any rate are concerned, to maintain these at their full establishment, and if necessary provide for their expansion.

The waste of war in the case of infantry may, in a small army, amount to more than 100 per cent. of the establishment during the first six months of a war, and will not be

much lower in the other fighting arms, and in large armies may equal about 60 per cent. of the establishment. It is generally admitted that even infantrymen, who are more quickly trained than men of the other arms, are not fit to take their places in the ranks until they have undergone training for at least four months. It follows, therefore, that, unless numbers of trained reservists are available to make good wastage, a drafting force little less in strength than the field army may have to be mobilized at the commencement of the campaign. Arrangements will also be required for the calling up of additional men for training in time to insure that they will be ready to take the field when required.

The strength of the British infantry at the commencement of the Crimean War was about 35,000 men, and was subsequently increased by the despatch of additional units to 43,000; that of the cavalry was at first about 3000, and later when new units arrived 5000. During the campaign, which continued for some eighteen months, though there was but little fighting during the last six months of the war, about 25,000 men to make good the wastage were sent to the infantry, and 2000 to the cavalry. In the campaigns of 1915-1918 the monthly drafts required to maintain the British infantry in France at its war establishment varied from 25 to 10 per cent. of the establishment.

Examples
of wast-
age of
personnel

More than men, however, is required to maintain armed forces. Arms, ammunition, aircraft, means of inter-communication, equipment, clothing, and vehicles must be manufactured and stored in sufficient quantities to insure that all will be available at the commencement of war; while the greatest possible output of the factories, and the capacity of docks and repair shops should be sufficient to meet all needs during its course.

Provision
of war
material,
etc.

The magnitude of the preparations involved may be estimated from the fact that, in 1918, 3,000,000 men and women were employed in Great Britain in the manufacture of munitions.

Horses, and mechanical and other land, air and water transport must also be earmarked, not only to meet mobilization requirements, but to make good the waste of war.

Similarly, stores of flour, meat, groceries, clothing and petrol must be maintained, or contracts made to insure that they may be available when wanted.

In addition to mobilizing and providing for the maintenance of an army, it is essential to arrange for its rapid movement from the places of mobilization to the theatre of war. In the case of Great Britain this usually involves the transport of men and material by ship and train, as well as on roads. It is, therefore, necessary to insure that dock, shipping, railway, and railway embarking and disembarking accommodation may be available, and also in certain localities in the Empire to construct roads and railways for the special purpose of facilitating military movements and operations.

In India, for instance, railways and roads are required to and along the north-west frontier, in Australia rapid communication by land is desirable between the states and territories included in the Commonwealth.

It will be evident, even from this summary of the military preparations necessary in time of peace to insure readiness for war, that heavy expenditure of money is involved. Since this money is apparently unproductive, that is to say the immediate benefits of the expenditure are not so evident as are those, for example, of funds spent on housing, education or national health, there is usually a tendency in time of peace to reduce expenditure on naval, military and aerial services, while funds are lavished in other directions.

Extravagance in expenditure on any service is to be deplored, for all excess is injurious; but insufficient provision for national security is surely a worse evil. In civil life, at any rate, the man who has omitted adequately to insure against fire meets with but scanty sympathy if his house is burned down, and the farmer whose poultry are raided for want of adequate protection is an object of ridicule.

"England," wrote Marlborough in 1702, "is famous for negligence"; and more than once has England shown that this taunt was not unjust, and has found herself ill-prepared at the commencement of a war, with the result that security has only been attained after enormous expenditure of men, material and funds.

In 1790, prior to the outbreak of war with France, there were, says Alison, "32,000 soldiers in the British Isles, an equal number in the East and West Indies, and 36 regiments of Yeomanry...and 150 ships of the line." By the time the peace of Amiens was made in 1802, England had spent £200,000,000 on war services, and more than 200,000 soldiers had been raised exclusive of militia. "This was a force not greater than that which could have been raised in a single year out of a population then amounting to nearly 16 millions in the three kingdoms; and if ably conducted and thrown into the scale when nearly balanced between France and Austria would unquestionably have terminated the war at the latest in two campaigns." During the period between 1791-92 and 1816-17, Great Britain, moreover, expended¹ on her naval and military services about £1,000,000,000, and her total expenditure amounted to some £1,700,000,000.

Britain's
situation
prior to
certain
wars

Had the British Army been so organized at the outbreak of the South African war in 1899 as to permit of 170,000 trained men—the Expeditionary Force of 1914—taking the field, instead of the force of 60,000 with which the British commenced the campaign, it is improbable that the war would have dragged on, at immense cost, for three years.

According to a member of the Government the British, in 1914, "were the worst organized nation in the world for war." The Regular Army amounted to 450,000 men, including reserves, the Territorial Force to 250,000. By the end of 1917, no fewer than 6,500,000 white soldiers, of whom 60 per cent. were English, besides 1,000,000 native fighting troops, had been raised in the British Empire, and the personnel of the Navy has been expanded from 150,000 to 450,000 men. By the end of the war the military figures had been increased to 8,700,000, of whom 5,700,000 were from the British Isles. In 1913 the total expenditure of the United Kingdom amounted to £200,000,000 per annum, and that on armed forces was about £75,000,000 annually. The total expenditure during the war of 1914-18 is estimated at £9,500,000,000, and the national debt has been raised to a sum of about £8,000,000,000 carrying interest at £400,000,000 per annum.

It cannot be denied that Great Britain has, as a rule,

¹ The value of gold was far greater, perhaps as much as three times greater, than at present.

been able to bring her wars to a successful conclusion, and it may even be claimed that the sums expended on them have not, on the whole, been greater than would be the cost of maintenance of larger and more efficient forces in time of peace. It must be evident, however, that such policy is not only wasteful of human life, since in war lack of efficiency can be remedied only by excessive expenditure of blood, but is also not without a serious element of risk.

In the British wars of the past, time was not, as a rule, a factor of supreme importance; and time, therefore, was allowed her in which to develop resources, form coalitions, and repair initial failure. So far as a struggle for the maintenance of the balance of power or "the surety of states" is in question, these conditions may no longer obtain; and such is the vigour and rapidity with which modern war may be waged that the issue has been decided within a month or six weeks of the outbreak of hostilities.

Short
wars ex-
emplified

In the war of 1866 between Prussia and Austria the active operations lasted for seven weeks, and the decisive battle of Königgrätz was fought within three weeks of the commencement of the struggle. In the Franco-German War of 1870, war was declared on the 19th July, and by the 2nd September, of the French armies which took the field one had surrendered at Sedan, the other was invested in Metz. The war in the Balkans against the Turks was declared by the Bulgarians on 30th September, 1912; on the 18th October the Bulgarians crossed the Turkish frontier, on the 22nd they gained a success at Kirk Kilisse, a week later the Turks were beaten at the battle of Lule Burgas, and on 17th November were driven into the Chatalja lines. (Map 2.)

The first considerable actions of the war of 1914-18 in Western Europe took place about the middle of August, 1914. By the 6th September the Franco-British forces had been driven by the Germans south of the Marne, where they rallied and checked the enemy. (Map 12 on p. 252.)

Modern conditions, therefore, may allow no time for the deliberate development of fighting power; and the very heavy strain imposed on nations by the magnitude of the forces which will be under arms, will also tend towards a plan

of operations with the object of rendering war short, sharp and decisive. If, then, British resources are to be employed to the greatest advantage, the British Empire should be prepared to throw its full weight into the scales from the earliest possible moment.

This condition implies not only general readiness for war, but its commencement at the moment when popular support is assured, and when other conditions are most favourable to national interests.

Great issues commonly depend on the skill with which diplomacy forces or postpones hostilities, for in war the result of the first great battle is largely influenced by the number of efficient units that are available, and defeat in the first serious encounter is, as has been pointed out, often followed by failure in the campaign.

Prior to the Crimean War, for instance, the Russian army occupied the Turkish territory of Wallachia and Moldavia, the modern Roumania. "By declaring," writes Kinglake, "that his military occupation of these provinces was not an act of war, the Emperor Nicholas did not escape from any part of the responsibility naturally attaching to the invasion of a neighbour's territory; and yet by making this announcement he committed the error of enabling the Porte to choose its own time for a final rupture...and in truth the latitude which it gave him (the Sultan) was highly convenient, because he was ill-prepared for an immediate encounter. Therefore, without yet going to a rupture the Turkish Government exerted itself to make ready for war." Instances of well-timed declarations of war

In the case of the struggle in the Balkans, in 1912, the allied Serbian, Bulgarian and Greek Governments, having for the moment compounded their own previous disputes, declared war in the autumn, when the harvest had been gathered and when the bulk of their populations, who are engaged in agriculture, could without serious disadvantage take the field. War was also commenced at a time when the normal organization and distribution of the Turkish forces had been disarranged by a war with Italy, which necessitated the withdrawal of troops from Europe to guard the coast of Asia Minor, by civil disturbances and a military mutiny in Macedonia, and by insurrections in Albania, in the Yemen

and in the Hedjaz. Further, war was declared when the Turks, after partially mobilizing their forces, had placed themselves at a disadvantage by dismissing the reservists to their homes, many of whom lived hundreds of miles away in Asia Minor. The chances, therefore, were in favour of the Allies, who proved to be victorious.

It is stated that in 1914 the Germans and Austrians, who were well prepared and not indisposed for war, deliberately seized the pretext afforded by the murder of the Austrian Archduke Ferdinand, at Sarajevo, by a Serbian, to provoke a conflict or gain a great diplomatic success against the Russians, who were believed to be unready for hostilities. It was decided, therefore, to impose on Serbia such terms that, if approved by the Russians, they would forfeit their traditional position as protectors of the Slav states in the Balkans; or, that if rejected, Russia must take up arms to support the Serbians. The Russian Government chose the second alternative, and the world war was the result.

A nation, then, prepared for war and convinced of its necessity is unlikely to give the enemy time to get ready to meet the impending blow; and those who postpone preparation for war until mobilization is in sight court the fate which so often deservedly pursues the unready.

STRATEGY IN WAR.

It is obvious that during war the civil, naval, military and aerial authorities should continue to pursue their respective functions.

As in peace, the business of the government is clearly to advance and safeguard national interests, the greatest of which is now the rapid and successful conclusion of the war.

One of its most important duties, therefore, is to indicate the naval and military objects to be attained, after due consultation with the naval, military and aerial advisers in regard to the technical questions involved in pursuing the desired objectives. Thus at the beginning of the Crimean War, the Duke of Newcastle, the Secretary of State for War, wrote to Lord Raglan, commanding the British army destined for operations against the Russians, "I have, on the part of Her Majesty's Government, to instruct your

Lordship to concert measures for the siege of Sebastopol, unless with the information in your possession,*but at present unknown in this country, you should be decidedly of opinion that it cannot be undertaken with reasonable prospect of success."

In similar strain in 1864 President Lincoln wrote to General Grant, commander of the Federal armies, in confirmation of plans agreed to in an interview at Washington: "Not expecting to see you again before the spring campaign begins, I wish to express in this way my entire satisfaction with what you have done up to this time so far as I understand it. The particulars of your plan I neither know nor seek to know. You are vigilant and self-reliant, and, pleased with this, I wish not to obtrude any constraints or restraints upon you. While I am very anxious that any great disaster or capture of our men in great numbers shall be avoided, I know these points are less likely to escape your attention than they would be mine. If there is anything wanting which is within my power to give, do not fail to let me know it."

The objects having been decided, it is of primary importance to accord, as did Lincoln to Grant, to the responsible naval, military and aerial authorities the fullest support and assistance, by insuring that all requirements for carrying the war to a successful conclusion may be placed at their disposal; new units being raised, if necessary, men provided to maintain the units already in existence, material manufactured and funds supplied.

To make adequate provision for such requirements seems to be a task of great difficulty, as there is a temptation for governments to indulge in petty economies, which may prove ruinous to the conduct of the campaign; or to give way to political or other pressure exercised against the withdrawal of men who can and should be spared from civil pursuits.

In 1702, for example, Admiral Sir Cloudesley Shovel was impelled to write "The misfortune and vice of our country is to believe ourselves better than other men, which I take to be the reason that generally we send too small a force to execute our designs." Examples of hesitation in meeting requirements

In 1760, too, the Marquis of Granby, commander of

the British contingent in Germany, wrote to the Prime Minister, "I can only say...that I was convinced of the necessity there was vigorously to exert ourselves the latter end of the year...I thought it my duty to represent at home what number of men we wanted to complete us...Great expenses...we have certainly been at in carrying on this war in every part of the world; very great here in Germany, but they were necessary expenses...Should more money still be wanted for the same good and salutary ends, I should not think that a recapitulation of the different great sums that have already been expended should in any shape be permitted to come into debate; but the only subject should be—Can you afford or procure any more money, yes or no? Just the same in regard to the sending over more troops; it is not to be considered how large a number has already been sent upon any service; but, whether, if more are wanting, there is a possibility of reinforcing the service that requires it. Upon that footing though thoroughly convinced of the great expense we have been at, and knowing the large number of troops that have already been sent to this country, I did not hesitate to present what I thought was necessary for the service I was engaged in, being convinced that nothing but an impossibility from the situation of affairs could have prevented an immediate compliance with the request."

In December, 1809, also, Wellington wrote to Lord Liverpool regarding the refusal of the Government to supply arms and accoutrements for the Portuguese. "His Majesty's Government must be the best judges whether it is proper to continue the war in the Peninsula; and whether the best mode of opposing the enemy in the Peninsula is by an exertion to create a military force in Portugal. But it is evident that we shall fail in producing the exertion of which this country is capable, and the Government and inhabitants are certainly willing to make, for want of means, unless His Majesty's Government should be able to assist Portugal with money as well as with arms and other equipments, for which I have sent to England requisitions at different times."

A month later he wrote in much the same style. "The people of Portugal and Spain are tired out by requisitions.

not paid for of the British, Spanish, Portuguese, and French armies, and nothing can now be procured without ready money. I hope, therefore, not only that every facility will be given to our getting money by bills upon England, but that some money will be sent out according to the requests for it which I have made to your Lordship." In February, 1810, Wellington again complained that "At this moment the troops are one month in arrear and I am unable to pay them ; and money is required to procure supplies from the country, which cannot now be got excepting for ready money." In March again he wrote, " I have long been obliged to keep the pay of the troops one month in arrears contrary to His Majesty's Regulations and the practice and necessities of the service, and we have not enough money to pay them at the end of this month."

The Parliamentary Committee that assembled early in 1855 to enquire into the conduct of the Crimean War, made a report to the effect that no provision had been made by the Government for a winter campaign ; that the expedition, planned and undertaken without sufficient information, was conducted without sufficient care and forethought, and that this conduct on the part of the administration was the first and chief cause of the calamities which befell our army. A Court of Enquiry assembled after the conclusion of the war also reported that the sufferings of the army in the Crimea were due to want of land transport ; this was produced by insufficiency of forage, and the insufficiency of forage was due to omission on the part of the Treasury to send a proper supply of forage from England.

The exclusion of Ireland from the Military Service Act of 1916, which introduced conscription into Great Britain, and the friction that resulted in its working in Great Britain, are recent instances of pressure brought to bear against the measures necessary to provide men for the fighting services.

On the other hand, and not unnaturally, commanders responsible for the success of the operations are apt to be unreasonable in their demands. This is shown by the correspondence between Wellington and Lord Liverpool in regard to the supply of reinforcements in 1810 (page 10).

When prosecuting a war the government clearly should

take steps to secure common action as well as unity of economic control between allied nations. At the same time every means should be used to weaken the political position of the enemy, by endeavouring to detach allies and friends, to change the attitude of neutrals, and even to influence public opinion in enemy territories.

It is when a single power, or closely connected group such as the Germanic Empires during the war of 1914-18, is opposed by a coalition, that an able minister finds most scope for his talents in sowing discord amongst allies whose interests can hardly fail, in some respects, to be divergent.

Diplomatic action exemplified

At the commencement of the Crimean War, Great Britain, France, and Turkey received the diplomatic support of Austria and Prussia, and Austria occupied Wallachia and Moldavia when the Russians retired from those provinces. Soon, however, Prussia withdrew or was induced to withdraw her support from the other powers, and Russian diplomacy now set itself to detach Austria from the allies. In March, 1855, a conference to consider terms of peace was assembled in Vienna, at which Great Britain, France, Austria, Turkey, and Russia were represented. Great Britain and France found themselves unable to accept the terms suggested by Austria, who at once "abandoned the attitude of armed menace she had long maintained against Russia." After the fall of Sebastopol, in September, 1855, Austria again endeavoured to arrange peace on conditions which had been secretly agreed to between France and Russia, without reference to the British Government. These were refused by Great Britain, the French Government being informed that, if necessary, the British would continue the war in alliance with Turkey.

During the war of 1914-18 the Germanic Empires were successful in attracting the Turks and Bulgarians to their party. By misrepresenting and distorting the actions of the Western group of Powers continuous efforts were made to produce discord, in regard to restrictions imposed by their blockade of Germany, between them and the United States as well as Holland and the Scandinavian Powers. Finally Russia was half forced, half cajoled, into a separate peace with the Germanic Powers, to the abandonment of her allies.

Throughout the war the Germans attempted to foment strikes and discontent in the territories of the Western Powers, and in 1916-17 even endeavoured to stir up a mutiny in the French army. The following remarks by the German Foreign Secretary in 1917 show that measures were taken to influence public opinion in enemy countries: "We have finally also to consider our relations with the belligerents. Although direct diplomatic relations have been broken, public opinion is not bound by frontiers made by our guns and trenches. Our newspapers reach enemy countries and we study the enemy's journals. Every official remark, even though uttered in confidential conversation, reaches our enemies in some form or other or goes as an echo."

"It is one of our important duties to study the psychology of our enemies, to follow their intrigues and the changing currents of public opinion so that our hand may not be proffered when the spirit of our enemies is hard and unbending, but also so that a sharp word may not be said when the ice on the other side is melting and a conciliatory feeling is beginning to be shown."

A government, however, should be on its guard against taking steps which, although harmful to the enemy, may indirectly strengthen his hand by the accession of neutrals. The unlimited submarine warfare, for instance, instituted by Germany against the Western group of Powers, in 1917, caused the United States and Brazil to abandon their neutrality and enter the war against her, and in addition a number of countries broke off diplomatic relations with the Germans.

In case of defeat diplomacy must evidently endeavour to gain time, by proposals for the suspension of hostilities and by negotiation; and should try to retrieve disaster by enlisting the good offices, if not the assistance, of other nations to which a permanent accession of power on the part of one of the belligerents may be disadvantageous.

For instance, towards the end of the Seven Years' War, after their reverses in 1759 and 1760, the French opened informal peace negotiations with England, which were continued throughout the greater part of 1761. Finding Pitt too intractable the French broke off the negotiations, and

Danger of
extreme
measures

Action in
case of
defeat

Instances
of negoti-
ation

at once induced the Spanish, who were then neutral, to sign an agreement to declare war on England on the 1st May, 1762, unless peace, which did not come until 1763, had been made before the former date. In the Balkan War of 1912-13 the Turks, by arranging a suspension of hostilities from 31st December, 1912, to 3rd February, 1913, gained time for the arrival of reinforcements from Asia. Jealousy in regard to the success of Serbia and Bulgaria in this campaign and as to their consequent expansion, also caused Austria to adopt a hostile attitude towards the former and Roumania towards the latter. In 1918, in a note regarding arrangements for an armistice with the Western Powers, the Germans wrote that their Government "trusts that the President of the United States of America will approve of no demand which will be irreconcilable with the honour of the German people, and with opening a way to a peace of justice."

If war is to be brought to a successful conclusion, a government must contrive to inspire its own people with sufficient resolution, and tenacity of purpose, to undergo the inevitable hardships until the moment most favourable for advantageous peace. This may demand exceptional strength of will on the part of civilized nations, who are now so largely dependent on external sources for the necessities of life, and for those luxuries which from long indulgence have become necessities, that a prolonged struggle involving shortage of food, coal, petrol, tobacco and alcoholic liquors may inflict almost unendurable hardship.

Instances
of inde-
cisive
wars

The war of the Austrian Succession, for instance, in which England and France took opposite sides, lasted from 1740 to 1748, and in the end peace was made between the two countries on the basis of mutual restoration of conquests; various outstanding questions being left over for settlement in the next conflict which occurred eight years later in the Seven Years' War.

Much the same was the result of the brief peace of Amiens between Great Britain, France, Spain, and Holland, in March, 1802, of which it was said that everybody in England was glad and nobody proud. In return for a war expenditure of £200,000,000, and a loss of 1350 officers and 60,000 men, Great Britain received Ceylon and Trinidad. But, as

Windham remarked in the House of Commons, "We had rescued Egypt, captured Malta and Minorca: in the East Indies possessed ourselves of everything except Batavia. We had made ourselves masters of the Cape. In the West Indies we had Martinique, Trinidad, St Lucia, and Guadeloupe. On the continent of South America we held Surinam and Demerara (in Guiana). Instead of retaining them as pledges to compel the restoration of the balance of power, all were surrendered." (Map 1.) War again broke out with France in May 1803, and ended only at Waterloo in 1815.

It follows, then, that it is usually wise to seize the opportunity offered by a substantial military advantage to try to end a war on terms which will secure the principal objects for which the struggle was commenced: since, apart from considerations of humanity, of expense, and of commercial losses, there is always a possibility, until peace is made, that an advantageous position may be reversed. This is shown by the experience of the Germans in the war of 1914-18, who, owing to defeats experienced in 1918, were obliged to give up Poland, Serbia and Rumania which had previously been captured.

Conversely, it may often be good policy for a nation which has been temporarily worsted to hold out in the hope if not of retrieving its position at least of securing good terms, for in war "the final judgment is not passed until the last cannon shot has been fired." At the same time, those who follow this policy must count what will be the cost if the tide of war continues to run strongly against them. The Serbians did not make peace after their defeats in the winter of 1915-16, and in 1918 were able to reconquer their country. On the other hand the Turks, who continued to fight after their reverses in 1917 at Kut-el-Amara and Beersheba (pp. 59 and 259), were obliged in 1918 to surrender unconditionally. In fact, as pointed out by the elder Pitt, peace will often be as hard to make as war.

MILITARY OBJECTIVE.

The objects for which war is undertaken, whether these include the conquest and subjugation of the enemy; or the attainment of guarantees for national security; or are merely

to enforce acquiescence in certain demands; or are defensive and aim at the conservation of territory; are gained by bringing the pressure of public opinion to bear on the government of the enemy's country. This is best effected through the destruction of the enemy's armed forces, and, if necessary, by the imminent menace of ruin to his commerce, industries, and the resources dependent on them, and in addition by the military occupation of the territory.

As a general rule the utter defeat and capture of the principal armed forces must, therefore, be the first consideration; and the results that can be obtained by this policy are shown by Napoleon's campaigns in 1800 and 1806 (pp. 203 and 58).

A nation, further, will usually attempt to carry war into the heart of the country of the most important of its enemies, with the object of protecting its own territory by attacking that of the enemy. The people will then be relieved of part of the strain and expense of war, being exempt from such hardships as requisitions, billets, and contributions, and from damage to their property. At the same time the greatest possible pressure will be brought to bear on the enemy, by depriving him of the power of utilizing at any rate a portion of his resources, and by making the people feel to the utmost the disadvantages of war. Thus in 1914 the Germans invaded Belgium and France.

The weaker rather than the stronger of allied states may, however, be attacked with the object of endeavouring to deal with the combination in detail, the defensive being temporarily adopted in other theatres, if required. This was done when the British attacked the Danes, in 1801 (p. 56). In 1915 the Germanic powers also followed this policy, and stood on the defensive in the west while the Russian armies were attacked and driven out of Poland, and the seeds were sown of the revolution which broke out in Russia in 1917, and resulted in peace between the Russians and the Central Powers.

It is, however, possible that on occasion, policy, relative force, relative readiness, or considerations of time and space, may demand the adoption of less drastic methods. For instance, during the Seven Years' War Britain's main objective was the conquest of the French Colonies in America, where the conditions were favourable for success. At the same time by

means of naval action, by subsidies given to our ally Frederick the Great, and by the maintenance of an Anglo-German army under Ferdinand of Brunswick in Westphalia and Hanover, the French, to use the words of Pitt, were "prevented from sending succours to their colonies."

At the commencement of the first Sikh War in 1845, and of the South African War in 1899, policy, which made it desirable to leave aggression to others, as well as the local weakness of Great Britain, obliged her to stand on the defensive. She had, therefore, to submit to the invasion of her territories, until sufficient forces could be collected to drive back the invaders and advance into their country.

The unreadiness of the British in 1914 also forced the Empire to remain on the defensive, so far as land operations on a large scale were in question, until a sufficient number of troops had been raised and trained for this purpose.

Again, the main military objective may be the capital of the enemy's country, when, as in the case of the occupation of Paris by the allies in 1814, there is a strong party in the state unfavourable to the Government, and its failure to secure the capital may result in revolution. The objective may also be the person of a leader, such as Napoleon, when resistance depends on his presence in the field.

Whatever the main objective, it should, always, be such that its achievement is within the power of the nation, and that when attained the objects for which hostilities were commenced are likely to be secured.

CONCENTRATION OF EFFORT.

The purpose of strategy in peace is so to prepare that should war take place it may be waged with every prospect of success. In war the primary aims of military strategy are to allot and dispose the forces so that victory in battle will be probable, and if gained will be decisive.

From this it follows that, so far as considerations of transportation, and the provision and distribution of supplies, stores and munitions will admit, the largest possible force should be collected in the area where it can most conveniently be used to inflict the greatest harm on the enemy; and where, if victorious, success will bring the greatest advantages.

Only the very smallest numbers that will suffice should be retained for, or diverted to, "the subordinate measures by which," according to the elder Pitt, "all great offensive operations must be buttressed"; such as the security of territory outside the main theatre of war, the safety of trade routes, the containing of hostile detachments, or action against other hostile states.

The main operation is all-important, and the greatest risk lies in reducing the forces allotted for this purpose. Success here will more than compensate for defeats elsewhere, and it is obvious that the larger the forces employed in the main theatre, in proportion to those at the disposal of the nation, the greater will be the chance of success.

Victory in a subsidiary operation will not counterbalance a check or disaster to the principal forces; nor will the true interests of the people be consulted if the forces engaged in defending these interests suffer defeat owing to the absence of units unnecessarily diverted to side issues, such as the pursuit of minor objectives, or the safeguarding of territory by their presence. As has already been pointed out, the safety of the country, for instance, will, as a rule, be best secured by striking hard at the enemy, who will then be so concerned to protect his own territory as to be unable to spare forces from its defence.

Just as in a street brawl a man strikes his opponent as hard and as often as he can in order himself to avoid defeat, so in war the first principle of strategy is that at the decisive point no force can ever be too strong. In this area, when the conflict is with an adversary of approximately equal strength, the largest forces possible must be concentrated; and, whilst risks are run in other quarters, here such forces must be employed as humanly speaking will assure victory. Even in war with an inferior power forces must be used that will place the issue beyond doubt.

The Duke of Wellington once observed that he was unable to "discover the policy of not hitting one's enemy as hard as one can, and in the most vulnerable place," and the advantages to be gained from concentration of effort are so evident that in the abstract they are beyond dispute. On the other hand to come to a decision as to where the principal blow is to be struck is far from being easy, and differences

of opinion may frequently arise in regard to the decisive point; for when all operations are important, judgment of the highest kind is required to make the wisest choice. If there are alternatives promising equally decisive results, preference should clearly be given to the objective which can be reached with least expenditure of effort; since this will enable larger forces and resources to be devoted to the purpose and consequently will facilitate its attainment. In any case it is essential for success that there should be no halting between two opinions, no weak compromise in regard to this matter, and that a definite policy should be fixed and steadily pursued. Compromise may be suitable in politics, but is out of place in war, where nothing will be accomplished by half measures, whereas some results may be obtained even when the main effort is expended on the worse of two alternatives.

The British land operations, for instance, during the war which ended in the unfavourable peace of Amiens, in 1802, were remarkable for lack of judgment on the part of the Government. This was especially the case in the operations during 1800, of which Cornwallis angrily remarked, "What a disgraceful and what an expensive campaign we have made! Twenty-two thousand men, a large proportion not soldiers, floating round the greater part of Europe, the scorn and laughing-stock of friends and foes." Possibly it would have been wiser for the Germans to have concentrated their efforts, in 1915, against the Franco-British rather than against the Russian armies; but their offensive on the eastern front, though indecisive, set Austria free from menace of invasion and drove the Russian armies out of Galicia and Poland.

Ineffective
enterprise
in 1800

German
policy in
1915

Concentration of troops in the principal theatre of war is not, however, sufficient. The culmination of all operations of war is battle; and no army can be too strong when a battle is imminent.

Concentration
for battle

Napoleon, who fought between 50 and 60 battles and won most of them, has left it on record that in his opinion no commander can be sure of success in battle, where the smallest accident may turn the balance. Common sense, therefore, demands that a leader who resolves to fight a battle should, so far as he is able, take steps to insure that the chances will be in his favour, by concentrating on the

battle-field every available unit; for the value of naval, military and aerial forces is clearly relative to their position. It is worse than useless to keep forces in hand for events after the battle; victory is the primary consideration.

Decisive success can never be assured, but the probability of success is increased by concentration of force. Dispersion will not only reduce the prospect of victory by lowering the numbers and resources available for action in any given locality, but will afford the enemy an opportunity of attacking and defeating our armies in detail.

Unity of
command

The concentration of effort requisite for success on the battle-field is evidently best secured by placing the control of all the forces in a theatre of war under one commander, by whose single will the movements of the troops and the disposal of resources can then be directed.

To co-operate is always difficult, and in spite of the happy termination of the Waterloo campaign, "where allied forces were under independent commanders (p. 177), it is, therefore, a maxim that an undivided authority provides the best augury of success. When there are two or more commanders they must first necessarily agree as to the plan of operations, for divergent action cannot lead to victory. As there are always at least two, and probably more than two methods of achieving the same purpose, differences of opinion may be expected. Such disagreements must, even if reconciled, involve hesitation and delay, and can at best be settled either by compromise, although to compromise is usually to weaken; or by the yielding of one or other party. Human nature, however, is rarely gifted with the ability to carry out with the greatest vigour a project which has been the subject of compromise, or to which one has unwillingly submitted; and this is demonstrated by the experience of Wellington and Cuesta, in 1809, in Spain (p. 180). Hence it is not surprising that Napoleon's continued successes have been attributed to the fact that his autocratic power was in most cases opposed by a coalition. This generalization may be said so far to be true that, as shown in the Jena campaign and in that of 1814 in Champagne (pp. 159 and 227), the operations of these coalitions were marked by divergence and delays, and in war these have dangerous ends.

The prosecution of the campaign of the French and British

in the Crimea, when the two armies were under independent commanders, was also lacking in energy (p. 62); and the difficulty of securing co-operation is illustrated by the fact that on the eve of the abortive assault on Sebastopol, on the 18th June, 1855, the French commander Pélissier suddenly changed the plans which had been concerted with Lord Raglan, and resolved to dispense with the preliminary bombardment.

The instructions to Lord French in 1914, enjoined him "to support and co-operate with the French army against our common enemies." On the other hand, owing to the weakness of the British force he was informed that, "while every effort must be made to coincide most sympathetically with the plans and wishes of our ally, the gravest considerations will devolve on you as to participation in forward movements where large bodies of French troops are not engaged, and where your force may be unduly exposed to attack.... In this connection I wish you to understand that your command is an entirely independent one, and that you will in no case come in any sense under the orders of any allied general." His task, then, was extremely difficult.

The cases of Ferdinand of Brunswick, who successfully controlled the operations of a mixed force of British and Germans in the Seven Years' War; of Wellington whose army was composed, in the Peninsula, in 1812, of British, Portuguese and Spaniards; and of Foch who led the French, British and Americans to victory in 1918, exemplify the advantages to be gained by unity in the command of allied forces.

Whatever may be said of Great Britain's successful adoption in these instances of the policy of unity of command, it cannot be claimed that she has consistently followed the maxim that concentration of effort in war is the first essential of success. It may be that the fact of having relatively small land forces usually at their disposal, and the possession of maritime supremacy which confers the power of striking blows wherever ships can transport troops, have combined to induce the British to undertake the pursuit of minor objectives; for these are often attractive owing to the apparent ease with which they can be attained, while it is hoped that their conquest will balance failure elsewhere. It may also be that the possession of an empire with many local interests

Great
Britain's
past
military
policy

to defend and exploit has caused the diversion of unnecessarily large forces for this purpose. The geographical position of the British Isles, from which expeditions could be launched overseas with relative ease, may have been a contributory cause. It is possible that the necessity of obtaining secure bases for world-wide commerce, and for its protection, has influenced the British in the direction of the policy of scattering force. Or again, British commercial interests may unconsciously have influenced British strategy, and the desire to harm enemy commerce and to acquire new markets may have encouraged dissemination.

The British Empire, however, was won and must at present, at any rate, be defended primarily in battles on and round the continent of Europe, and not by means of local successes in distant theatres overseas; and it was victory in the continental theatre and nothing else which in the past enabled these local successes to bear fruit.

Decisive
theatres
of British
wars in-
stanced

The victories of Marlborough on land and Rooke at sea were the principal factor in the war of the Spanish Succession; British failures on the continent were followed by the inconclusive peace at Aix-la-Chapelle, in 1748, after the war of the Austrian Succession; and Napoleon's ruin began at Trafalgar and was completed at Waterloo in 1815. Even in the Seven Years' War, when Canada was conquered and the groundwork of British power securely laid, our naval supremacy was asserted at Lagos and Quiberon (Map 2); and Pitt admitted that America had been conquered in Germany, where Prince Ferdinand's victories had shattered the whole military power of France.

In the great war with Germany the fate of our Empire was decided in the North Sea and in France and Belgium, not in Salonika, Palestine or Mesopotamia; and it was in the main probably reaction following on the failure of the German offensive in France that, in the autumn of 1918, caused Germany's allies hastily to surrender instead of awaiting the then inevitable defeat of the German armies.

Policy of
dissemin-
ation and
concent-
ration
exempli-
fied

Three examples may be quoted illustrating the results of the policy of disseminating the forces of the nation. In the war which lasted from 1778 to 1783 when France, Spain and Holland took sides with our revolted North American colonies, England was numerically inferior in sea power to

the Allies, and had, therefore, everything to gain by concentrating her naval forces in the more important theatres. She attempted, however, to secure all her world-wide possessions, and consequently was weak everywhere. As a result, and although the Allies directed their operations mainly against British commerce and outlying possessions, the North American colonies now included in the United States, as well as Florida, Minorca and the West Indian island of Tobago, were lost to the Empire.

In 1809 Great Britain entered into an alliance with Austria, engaging to pay a subsidy of £2,000,000 down and £400,000 monthly, and in addition to support her in the war against France with the whole of the naval and military forces of the Crown. The total of the regular land forces then amounted to some 250,000 effectives, about 150,000 being at home. Of the remainder 25,000 were in India and Ceylon, 21,000 at the Cape and in minor garrisons, 8000 in Sicily, and 15,000 in Lisbon. (Map 1.)

At this period, Spain, Italy, the Netherlands and portions of North Germany were allied to or occupied by the French, who also held colonies in the West Indies. A number of military objectives were, therefore, open to Great Britain, who could send direct assistance to the Austrians, or, should this prove to be impracticable, could effect a diversion in their favour by attacking France, or one of the countries allied or subject to the French.

The nearer that an effective blow is struck to the enemy's centre of gravity the greater will obviously be the results; and the most profitable military action open to the British would, therefore, have been direct support of the Austrians, or invasion of France. Neither alternative was selected. Time perhaps would not have been available for direct and effective assistance to be rendered to the Austrians, and the effort required to move and maintain troops at such a distance from England would also have been very great; on the other hand the difficulties of an attack on France were probably considered to be too serious. Failing either of these alternatives, the blow should have been directed where the greatest effect was likely to be produced with the forces available; and, speaking generally, this would be more probable in a locality near to than at a distance from France. After due considera-

tion, however, it was decided to adopt the ineffective policy of dissemination, and to undertake active operations on land in the West Indies, with the object of protecting trade by conquering the islands held by the French; to send 30,000 men to undertake a campaign from Portugal against the French troops in the Peninsula; to operate from Sicily against Naples; and to land 40,000 at the mouth of the Scheldt in the Netherlands. The last enterprise had for its objects the capture of a French squadron lying at Flushing, on the island of Walcheren, the seizure of Antwerp, and the destruction of some warships under construction in the Scheldt. (Maps 1 and 2, and Map 7 on p. 178.)

Great Britain, therefore, disposed her available land forces in such a fashion that nowhere had she sufficient troops to justify the hope of attaining decisive results.

It is probable that, at this period, owing to the absence of good roads and to the difficulty of obtaining land transport, a British force exceeding 30,000 could not have been supplied with food and munitions in Portugal; and Wellington, indeed, stated that for want of means and provisions he could never have brought 60,000 men to Talavera in 1809 to fight a battle: but this objection does not apply to the Netherlands.

The dispositions of the French troops during the summer of 1809, when one large army under Napoleon was engaged with the Austrians in the valley of the Danube, when other considerable forces had been absorbed in Spain and in Italy, and when Prussia, smarting under her defeat at Jena in 1806, was already plotting to throw off the French yoke, were also such that circumstances were favourable for a stroke nearer to France than was Portugal; since no important French forces were likely to be available to meet the British in the Netherlands or North Germany. Probably, then, the bulk of the British forces that were available might with advantage have been sent to Holland, or to Germany, where the presence of a British army might have been the signal for a rising against the French.

The expedition to the mouth of the Scheldt was certainly a failure; but, says Fortescue, "the diversion in the Scheldt threw Paris into a panic, and...if successful would have gone near to overthrow Napoleon's empire."

The efforts made by the Germans in the first battle of

Ypres in 1914, in the second battle of Ypres in 1915, and again in the spring of 1918 to reach the French Channel ports, and the serious naval consequences that might have followed from their capture, were, apart from other considerations, sufficient to fix Artois and the north-east of France generally as the point where the principal land forces of the British Empire were obliged to be concentrated in our latest great war; and in spite of some hesitations, as exemplified by the expedition to Gallipoli, the British remained constant to this policy. The force allotted for the capture of the Gallipoli peninsula in April 1915 amounted, in the first instance, only to about five British divisions and one French division. The majority of the British troops were also drawn from the garrison of Egypt, which would indirectly be protected from Turkish aggression by an attack on so vital a point in the Ottoman Empire as the Dardanelles. (Map 2.) Primarily, then, no very serious reduction was made of the troops available to reinforce the armies, amounting to some sixteen divisions, which at that time were serving in France. On the other hand the force was too small for its great task, and the campaign at Gallipoli proved a failure and most costly in personnel, nearly 100,000 men, besides those killed in action, being admitted to hospital in the course of the operations. Although the Turks also suffered heavy losses, there can be little question that these men could more advantageously have been used to support the French and British offensives in 1915 in Champagne and Artois. Lord French, indeed, writes that "the detachment of troops and war material to the Dardanelles was undoubtedly the chief cause" of their failure. It is probable that when this expedition was undertaken the total of the effective forces at the disposal of the British¹ was inadequate to maintain a principal as well as an important subsidiary operation; and it does not appear that a detachment larger than was actually made could have been spared from the French armies. It may be concluded, then, that the despatch of an Anglo-French army sufficient to take Constantinople might have been prejudicial to the position on the Western front. At that

¹ Up to June 1915 twenty-seven infantry divisions, British, Dominion and Indian, had taken the field. By the end of this year the number had been increased to sixty, and of these thirty-eight were serving in France.

period, also, Russia was no longer in a position to send assistance, and it was at least doubtful whether the neutral states of Bulgaria and Greece would declare for or against us; and their actions were likely to be influenced in one direction or other by initial success or failure at Gallipoli. The reverses of the allies were in every way prejudicial to their cause, for the Bulgarians joined the Central Powers in October, 1915, and Greece remained neutral until 1917.

Blenheim
in 1704

In Marlborough's Blenheim campaign in 1704 is seen the right policy of concentration and its results. In 1701, England, Holland, and Austria, with certain other German states, and later with Savoy and Portugal also, formed a league against the French and Spanish—who were subsequently joined by the Bavarians—with the object of resisting the claim of Louis XIV that his grandson should succeed to the throne of Spain; an arrangement which the English had reason to fear might result in the establishment of French preponderance in the Spanish Netherlands (the modern Belgium) and in gaining for France a predominant position in the trade with Spanish America. War was declared in the following year, and was continued during 1703 without decisive results, at sea, in the Netherlands, where the allied forces were fighting under the leadership of Marlborough, in Germany and in Italy. (Map 2.)

In the campaign of 1704, Louis proposed to try and finish the war by a concentration of effort against the Austrians, then in serious difficulties owing to an insurrection in Hungary. To this end a containing force was to watch the English and Dutch in the Netherlands, a detachment was to be sent to assist the Hungarians, and two armies advancing one from the Rhine, near Landau, and the other from Italy through the Tyrol, were to join the Franco-Bavarian forces operating in the valley of the Danube and march on Vienna.

Meanwhile, Marlborough had also come to the conclusion that finality was not likely to be attained by continuing the policy of dispersion of force and the slow reduction of fortresses which had marked the first two years of the struggle in the Netherlands. Therefore he also proposed to stand on the defensive in the Netherlands, transferring as many troops as possible to South Germany. Here, in combination with the Austrians and the forces of Baden, a strong offensive

could be undertaken against the French and Bavarians, which if successful would probably detach the latter from the French, and thus close the line of invasion up the Danube on Vienna. At the same time, in order to prevent a French concentration against this attack, diversions were to be made into Spain from Catalonia, and from Portugal, which had joined the British and their allies; and also with the help of the British fleet from Savoy against Toulon.

The necessary measures having been arranged with Prince Eugene, who was transferred from Italy to command an allied force in Baden, Marlborough set out in May with fifty-one battalions, and ninety-two squadrons and other troops, and after intimating to the various allies that operations were to take place on the Moselle, moved up the Rhine to Maintz as if to invade Lorraine. Having thoroughly mystified the enemy he now struck south-eastwards, and, says Coxe, "with such skill and science had this enterprise been concerted, that at the very moment when it assumed a specific direction the enemy was no longer able to render it abortive." Although the French were able eventually to effect a junction between the army of the Rhine and the Franco-Bavarian force, Marlborough and Eugene defeated the combined French and Bavarians in the hard-fought battle of Blenheim on the 13th August. The result of this battle was that Bavaria submitted to the Emperor of Austria, the Hungarians laid down their arms, the French evacuated Germany, and for the remainder of the war were reduced to the strategical defensive.

SURPRISE.

Wellington once attributed his success to "always being a quarter of an hour earlier than he was expected," and even without this evidence it would be clear that surprise is a powerful factor in war, for men surprised are men confused and unbalanced, and therefore more than usually liable to error. Moreover, without the element of surprise, superiority of force at the decisive point may not be attainable, for the enemy will probably be prepared to meet, and may even anticipate, the blow if he ascertains when and where it is to be struck.

Hence a second principle of strategy consists in making,

if possible, arrangements to deceive the enemy; and then in acting with such rapidity and decision as to insure that if not actually surprised, he shall at least be but ill-prepared to meet the stroke, and must therefore give way and conform to our movements or fight a battle in disadvantageous circumstances.

This usually involves taking the first step and the delivery of a timely attack.

The power to take the first step, and in doing so probably to place the enemy in the dilemma of being obliged either to fight at a disadvantage, or to conform to our movements, is known as the initiative; and this generally belongs to the commander "who has a plan, who makes the necessary combinations for its achievement, and who can persevere in its execution." Possession of the initiative, then, at the commencement of a war is largely dependent on readiness to begin fighting, and during the campaign on success and on ability to continue the struggle with the greatest energy.

The initiative is necessarily of the greatest importance, for a commander possessing it can strike or feint when and in what direction he pleases, and his opponent may be kept in doubt, until too late to meet it with effect, as to the place where the heaviest blow will fall. In fact, the initiative often confers the advantage of being in a position to effect a surprise. On the other hand, if a commander who makes the first move is not prepared to follow up his movement in an effective manner, the results will usually be disastrous, for hesitation and doubt will infect his army.

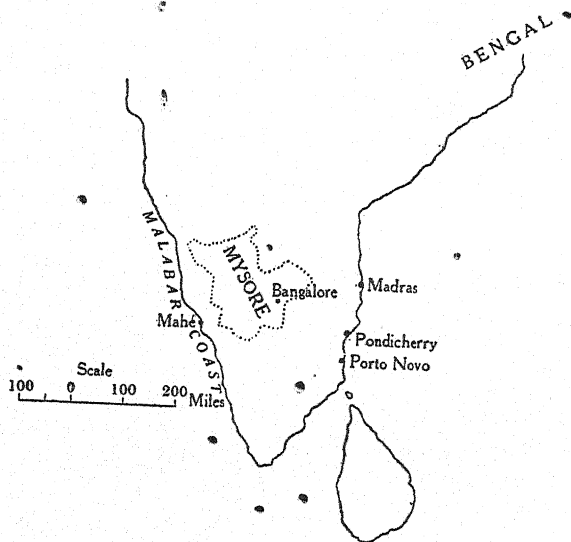
Instances
of strategical
surprise

Marlborough's Blenheim campaign in 1704 shows one aspect of the advantages of the initiative and of inflicting a strategical surprise (p. 52).

In 1756 the British suffered a strategical surprise. War with France had now for some time been imminent, and the ministry was aware of the possibility of an attack on Minorca, which had been captured, in 1708, during the war of the Spanish Succession, and was held by a small British garrison of 2800 men. No steps, however, were taken to secure the island until, on the 7th April, a small but ill-found fleet under Admiral Byng was sent to the Mediterranean. On the day after Byng's departure 16,000 French sailed from

Toulon, and landing in Minorca on the 18th April quickly invested the British in Port Mahon. Byng arrived off Minorca in May, having picked up a battalion at Gibraltar, but withdrew after an indecisive action with the French fleet. Soon afterwards the French received reinforcements, and pressing their attack on the garrison obliged it to surrender on the 28th June. (Map 2.)

In 1780 events took a somewhat similar turn in India. Here a British force from Madras which had in 1778 captured Pondicherry, the capital of the French possessions in Southern India, proceeded to attack, in the following year, another French post, Mahé, on the Malabar coast near the



borders of the independent state of Mysore. On being notified of the advance of the British to attack Mahé, the ruler of Mysore, Hyder Ali, informed them that he would consider such action a menace to his kingdom. The British, nevertheless, persisted in their intention, capturing Mahé in March, 1779. Hyder Ali consequently assembled a large force at Bangalore, his capital, and although he made no secret of his preparations the Government of Madras failed to take any military measures to meet this threat. In June, 1780, Hyder invaded the Madras presidency, and advanced unopposed to within about 40 miles of the city of Madras. It was not until the autumn of the next year

that Hyder was defeated at Porto Novo by Sir Eyre Coote, who had brought troops from Bengal to the assistance of the forces in Madras.

Eighteen years later, in 1798, during the struggle with Revolutionary France, the British Government experienced another strategical surprise. Early in the year news came in that preparations were being made in France, Spain, Italy and Corsica on a large scale for an expedition overseas. Inferring from the disposition of the French and Spanish fleets and from activities in the French Channel ports that the objective might be England or Ireland, the British took special measures to watch the Channel and western ports of France, and the straits of Gibraltar; but a small squadron under Nelson was subsequently sent into the Mediterranean to observe Toulon, where a concentration of French shipping had been reported. (Map 2.)

Meanwhile Napoleon, to whose leadership the French expeditionary force had been confided, had become doubtful as to whether, in view of the naval superiority of the British, it would be possible to maintain in the British Isles a force sufficiently large to insure their subjugation. He had, therefore, persuaded the French Government to undertake the conquest of Egypt, where it was hoped to establish a base for operations against the British in India. Before embarking the bulk of his army at Toulon and Marseilles Napoleon issued a proclamation to the troops, in which they were declared to be one of the wings of the army destined to conquer England, and were informed that the genius of liberty had now determined that the French should become the arbiters of the seas and of the most distant nations. "In such magnificent mystery," writes Alison, "did this great man envelop his designs even when on the eve of their execution." The expeditionary force left France on 19th May, and after picking up detachments from Genoa, Civitavecchia and Corsica, succeeded in effecting its landing in Egypt on 1st July, having fortunately escaped meeting with Nelson's squadron.

In the same war Great Britain in her turn seized the initiative with effect. Towards the end of 1800 a maritime confederacy had been arranged between the neutral states of Russia, Sweden, Denmark and Prussia, under the terms of

which it was agreed that, when carried in neutral vessels, certain articles only should be considered as contraband of war, and liable to capture; and that when ships were under convoy, the declaration of the commander of the protecting warships that no contraband goods were being carried should insure exemption from search. It was further stated that the contracting parties, if disquieted or attacked for this convention, would make common cause to defend one another.

The convention was considered by Great Britain disadvantageous to her interests, since under its terms the force of economic pressure exercised by a victorious naval power would be greatly lessened, and France would be able securely to carry on an oversea trade under a neutral flag.

The challenge was therefore taken up. The naval resources of the Confederacy were so large that, if allowed to develop and combine with those of the French, England's naval supremacy might have been rendered precarious. It was resolved to anticipate this contingency, to seize the initiative, and surprise the Confederation by attacking at once the important Danish fleet of twenty-three ships of the line and fourteen large frigates, before it could be joined by the Swedish and Russian navies. Consequently a naval force was sent, in 1801, to the Baltic under Hyde Parker and Nelson, when the latter destroyed or took a portion of the Danish fleet. This prompt action went far towards ending the Confederation, which soon afterwards dissolved.

In 1807 Great Britain again found herself obliged to attack the Danes. In June of this year the British had agreed to support Russia, Prussia and Sweden against the French, by the despatch of 20,000 men to Pomerania, where, with the assistance of 18,000 Swedes in the pay of the British, they were to operate against the left flank and rear of the French army then in Poland and East Prussia. Soon afterwards the Russians were defeated at Friedland, and as a result peace was concluded at Tilsit between France, Russia and Prussia, in July. Under this treaty it was agreed that if Great Britain refused the mediation of Russia a naval coalition of all the powers of the Continent was to be formed against her, the fleets of Denmark and Portugal being seized if these countries refused to become parties to the project. On receiving news

of this proposal Great Britain resolved to anticipate the enemy by capturing the Danish fleet; and as the first division of the Pomeranian expeditionary force was already at Rugen, and the rest about to embark, the force, made up to a strength of 27,000, was diverted against Copenhagen, together with a fleet of twenty-five battleships and forty cruisers and other war vessels. On the 5th September the city was captured after a short resistance, and early in October the force returned to England with a prize of seventeen battleships and a number of smaller vessels, and between 2000 and 3000 guns.

In 1914 the British suffered a strategical surprise, and their military weakness enabled the Germans to gain, at first, considerable successes on land.

The disadvantages of seizing the initiative prematurely are shown in the first Sikh War, when the Sikhs invaded British territory in insufficient force and were beaten in detail (p. 172). McClellan in his campaign in the Yorktown peninsula in 1862 also seized but subsequently abandoned the initiative, and was defeated (p. 123).

VIGOROUS ACTION.

A third principle of strategy is to give no respite to the enemy until his strength is exhausted.

Whatever the aim, therefore, it must be pursued with the greatest energy and the whole might, when the enemy will probably be forced into the disadvantageous policy of conforming to our operations and abandoning his own plans. Hesitation and half measures do not diminish—they increase—risk, for the enemy will then either be afforded an opportunity of taking the initiative and imposing his will on us, or given time to recover from our blows or to prepare to meet them.

Vigorous
offensive
exemplified

No better instance of the success which follows a well-concerted, vigorous and sustained offensive can be given than the campaign of Jena, in 1806, between France, and Prussia in alliance with Saxony. (Map 3 on p. 124.)

On the 8th October, the armies of Napoleon concentrated round Bamberg. Six days later the Prussians and Saxons were totally defeated at Jena and Auerstädt, losing

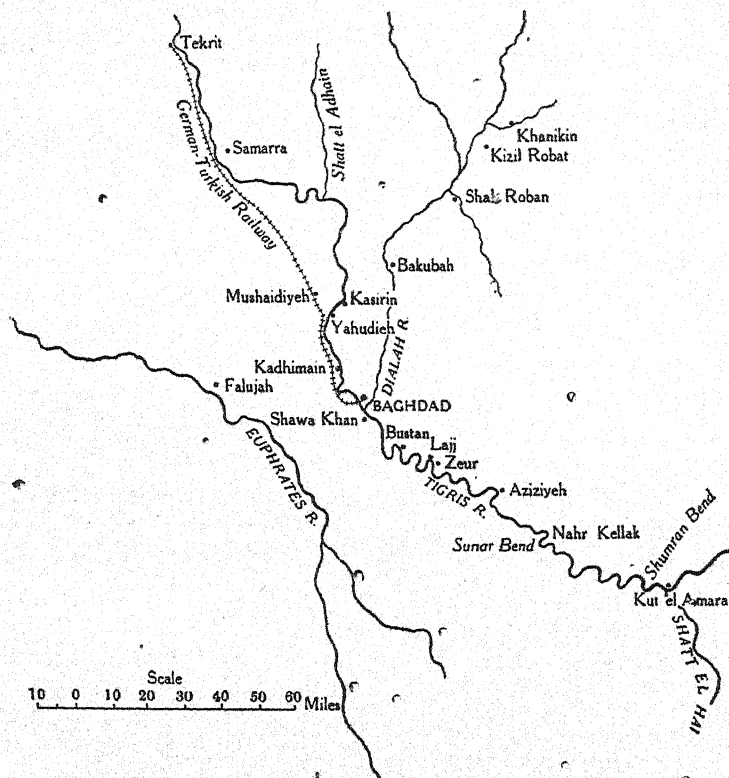
20,000 killed and wounded, and the same number of prisoners, out of some 125,000 men present at the battles. So vigorous was the pursuit that the French soon accounted for almost the whole of the remainder of the armed forces of the allies. On the 15th October, 14,000 men were captured at Erfurt, and on this and the next day some 4000 were killed or taken at Greussen and Nordhausen; 3000 more were disabled or captured on the banks of the Saale on the 17th, on the 28th 14,000 laid down their arms near Prenzlau, and two days later Stettin surrendered with its garrison of 5000 men. By the end of the first week in November some 25,000 troops under Blücher, about half of whom had not fought at Jena, had been put out of action or taken prisoners. On the 8th November the fortress of Magdeburg capitulated with its garrison of 20,000 men, and either before or shortly afterwards practically the whole of the Prussian fortresses on the Oder and Weser fell into the hands of the French, with the exception of those in Silesia. Only about 15,000 men, the remains of the Prussian armies, succeeded in reaching the Vistula, where they joined a Russian army assembling to take the field against the French.

The operations of Maude's force, in 1917, in Mesopotamia, consisting of a cavalry division and two corps, numbered 1st and 3rd, each of two divisions, and in all some 50,000 fighting men, afford a modern example of a vigorous offensive. The attack against the Turkish positions astride the Tigris near Kut-el-Amara was begun on the night of the 13-14th December, 1916, and continued without a break, except when the waterlogged condition of the country prohibited movement, until the enemy was forced north-westwards into hurried retreat on the 25th February, 1917 (p. 170).

Meso-
potamia
in 1917

Early on this day the British cavalry division and 3rd corps commenced the pursuit, while gun-boats were also sent up the Tigris for their support. A Turkish rear guard was encountered about ten miles after passing the Shumran bend, and was driven back after a sharp fight. Next day the pursuit was continued in two columns, one following the river while the other moved direct to the Sunar bend. The Turks, however, escaped the enveloping movement by a rapid march of eighteen miles, and of the land forces only the British cavalry was able to get touch with their rear

guards near Nahr Kellak. The gun-boat flotilla, however, pushed past this place and with the cavalry maintained contact with the enemy throughout the 27th, capturing a number of enemy vessels and driving his troops in confusion through Aziziyeh, fifty miles from Kut. Up to this point 4000 prisoners and 39 guns had been taken.



The pursuit was now broken off, in order to allow the 1st corps to close up and to enable the supply services to be reorganized and measures to be taken against Arab marauders; and it was not until the 5th March that the 3rd corps was able to advance eighteen miles to Zeur, while the cavalry obtained touch with the enemy at Lajj, seven miles further on. A dust storm, which had commenced on the 5th, continued to blow throughout the 6th when the 3rd corps reached Bustan, the 1st corps Zeur and the cavalry reconnoitred to within three miles of the Dialah. This stream

was found on the 7th to be held by strong enemy forces, and during the night of the 8-9th March a few British troops succeeded in crossing it, but could make no headway. On the 9th, accordingly, the cavalry and part of the 1st corps moved over the Tigris and engaged the enemy near Shawa Khan. On the morning of the 10th these troops continued their advance in a dust storm to within three miles of Baghdad, and the city was occupied on the 11th, the cavalry advancing to Kadhimain. Meanwhile the 3rd corps had forced the passage of the Dialah on the 10th, and following up the enemy also reached Baghdad on the 11th. The Turks now definitely broke up into two groups, one moving to the east of the Tigris and the other to the west of this river and along the railway. On the 13th and 14th the dams at Yahudieh and Kasirin, twenty and twenty-eight miles from Baghdad, were occupied by the British; and on the latter date the 1st, with part of the 3rd, corps gained touch with the enemy at Mushaidiyeh, twenty miles north of Baghdad, from which the enemy was driven. The Turks now withdrew so hastily that contact with their main body was lost, and only a few stragglers were observed twenty-five miles north of Mushaidiyeh. On the 14th a post was also established on the right bank of the Dialah opposite to Bakubah: this place had been occupied by a Turkish detachment from the 13th corps, to cover the retreat of the remainder of this corps which was opposing the advance of a Russian force through the Khanikin pass. Bakubah was captured on the night of the 17-18th, and on the 23rd the British advanced to Shah Roban, near which the enemy was found in force and occupying a strong position; and here our troops were engaged with the Turks until the end of the month.

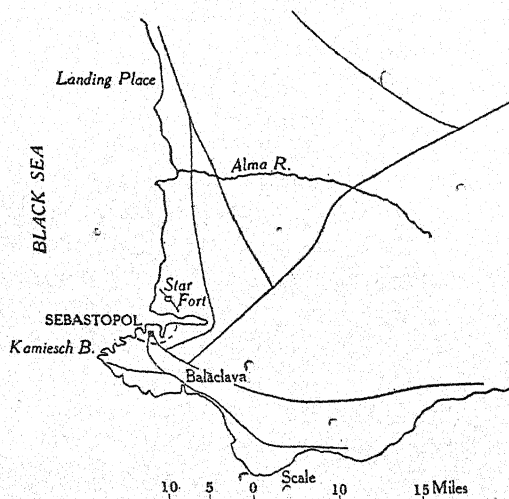
On the 27th the Turks advanced down the right bank of the Dialah and also from the Shatt-el-Adhain, with the object of clearing the line of retreat of the troops falling back before the Russians, but were driven back in both places, and with this repulse active operations ceased for a time.

The total number of prisoners captured by the British amounted to 8000, and the distance covered from Kut to Mushaidiyeh was more than one hundred and fifty miles, and to Shah Roban from Baghdad seventy-five miles.

Dilatory
opera-
tions
illus-
trated

The operations of the Allies in the Crimea are in marked contrast with these energetic campaigns.

The disembarkation of the British and French armies on the Crimea was begun on the 14th September, 1854. No opposition was encountered, and by the evening of the 18th 63,000 men and 188 guns had been landed, together with transport for the carriage of food for three days and ammunition for two battles, including what was on each man and horse. The hard-fought battle of the Alma was won on the 20th, but no immediate pursuit of the Russians was undertaken, owing, it is said, to the fact that the French before advancing to attack had taken off their knapsacks and could not go forward without them.



On the 23rd, having evacuated their wounded to the fleets, the Allies advanced along the rugged coast towards Sebastopol, finding everywhere on the road signs of the enemy's hasty and disorderly retreat; and on the evening of that day they halted within sight of the work, a star fort, guarding the north front of Sebastopol. It was now decided that this work could not be assaulted with reasonable chance of success, even though the Russians must still have been under the influence of their defeat at the Alma; and that before attacking Sebastopol the Allies must move round to the south front of the fortress, in the vicinity of which were some small bays where secure connection could be established

with the fleets, and the supply of food, munitions and other necessities assured.

The march round Sebastopol began on the morning of the 25th, the allied troops narrowly missing an unexpected encounter with the Russian field army, which had abandoned Sebastopol and was retreating northwards. On arrival opposite the south front it was agreed that an assault could not be made on the Russian works, which were stronger than those protecting the north front, until the siege trains of the two armies had been landed. The siege batteries were unable to open fire until the 18th October, and by this time the Russian fortifications had become so formidable that a regular siege was necessary. The fortress fell at the beginning of September, 1855, and in the final assault alone the Allies lost nearly 10,000 officers and men killed and wounded.

In addition to its other advantages, the attainment of rapid and decisive victory will check all inclination for interference on the part of other powers, who will usually attempt intervention only when the belligerents are exhausted or when even the victor is in an unfavourable situation.

In the Russo-Turkish war of 1877-78 the Russians forced the passage of the lower Danube, at that time the northern frontier of Turkey, in June, 1877, but were not able to cross the Balkans until after the fall of Plevna in December. (Map 2.) Adrianople was captured on the 20th January, 1878, after which the resistance of the Turks practically collapsed, and an army of about 100,000 Russians marched on Constantinople. In spite of the successful advance of the Russians after the capture of Plevna, the situation of their army on arrival before Constantinople was far from favourable. The worst portion of the winter was at hand, the Turks controlled the maritime communications in the Black Sea, behind the Russians lay a long and precarious line of communications overland to Russia, and in front were the fortified lines of Chatalja, of sufficient strength to check the Russian army if only the Turks, either alone or with the help of allies, could muster up resolution to make a stand. In these circumstances the British Government intervened, since it was considered that British interests might have been greatly prejudiced had the Russians conquered and retained Con-

Examples
of inter-
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when
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of victor
is unfav-
ourable

stantinople and the Dardanelles. The Mediterranean fleet was, therefore, ordered to Besika Bay, £6,000,000 were voted for warlike purposes, and the Russians were informed that the occupation of the Dardanelles would endanger the good relations between the two nations, and at the same time were pressed to negotiate an armistice with the Turks.

An armistice was consequently arranged, the Turks being obliged to yield the outer portion of their fortified lines, though, as an offset, a detachment of the British fleet entered the sea of Marmora. Soon afterwards a preliminary treaty was settled at San Stephano a place near Constantinople between Russia and Turkey. The terms of this, however, seemed so menacing to the interests of Austria as to induce her to move large bodies of troops into Galicia, thus closely threatening the Russian lines of communication, and to join England in urging Russia to submit the treaty to the consideration of a conference of the powers of Europe. On the advice of Prince Bismarck Russia now gave way, and as a result of the conference which met at Berlin a new treaty was made, considerably modifying the treaty of San Stephano to the disadvantage of Russia.

DIRECTION OF BLOW.

The choice of objective—that is the object against which or direction in which the strongest blow is to be struck—should, as has been pointed out, be governed by considerations as to whether success will quickly lead to decisive results.

The enemy's principal armed forces are, therefore, generally the first and main objective, but to follow them might be disadvantageous, obliging us to regulate our movements by those of the enemy, and probably to fight in localities selected and fortified by him, and favourable for the execution of his plans.

A force, therefore, does not of necessity move directly against the enemy's main army, but may advance towards some locality—such as the capital, which was done in 1882 when the British moved on Cairo (p. 76); a great arsenal; a manufacturing centre, like the neighbourhood of Lille; localities, such as the Westphalian coalfields, from which the

enemy's munitions or minerals are drawn; or a fertile district—for the defence, of which the enemy's army must either leave positions or localities perhaps more favourable for his projects, or must accept the moral and material disadvantages of abandoning capital or territory of value. Or the advance may be made in such direction as to place the enemy in a difficult situation if battle is accepted; for instance, where, if defeated, he will be separated from his own country, as was the case with the Austrians in the Marengo campaign (p. 203); or where there is little room to manœuvre, as was the case when the Germans attacked the British in the north-eastern portion of France, in the spring of 1918, who fought with their backs to the sea (p. 178). Or the weakest part of the enemy's front may be attacked with the object of causing loss and so breaking his power of resistance, a plan which was followed by Napoleon in 1815 (p. 177), and by the Germans in their attack on Reims and Soissons in May, 1918.

This, however, opens up the whole question of manœuvre in war, which is dealt with in other chapters.

CHAPTER III

THE INFLUENCE OF SEA AND AIR POWER.

THE sea, at present, is the element mainly used for communication between nations, and as few continental nations, even, are now self-supporting, and can exist for long periods without the importation of supplies and raw materials from overseas, maritime supremacy must exercise a most important influence on the course of war in wearing down the enemy's power of resistance. If this is true as regards continental nations, it follows that the loss of the power to control maritime communications would probably prove fatal to an island empire at war with a nation possessing of great military as well as naval forces. In such circumstances invasion would present no special difficulties, while the importation of food and raw materials would be most precarious. The island would therefore resemble an invested fortress which could rely for relief only on its own efforts, and would probably be forced to yield in the long run owing to starvation, even if successful in repulsing the enemy's attacks.

Examples
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of mari-
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premacy
alone

The struggles between the English and Dutch during the 17th century show, nevertheless, that the results to be obtained from maritime superiority alone are likely, as a rule, to be inconclusive. Twice did the Dutch fleet defeat the English fleet in 1652, and in the following year the English gained four victories over the Dutch, destroying or capturing as many as thirty of their men-of-war in the final battle on 31st July. In 1665 the English and Dutch were again at war, when the English were successful in two naval actions. The next year was signalized by a four days' battle between the fleets, followed by an English victory off the North Foreland. In 1667, however, the Dutch destroyed the English shipping at Chatham, took possession of Sheerness for a time, and sailed up the Thames to Gravesend; and as a result peace was made. The English and Dutch again quarrelled in 1672, the English now being allied with the French, in conjunction with whom an indecisive action was fought with the Dutch off the coast of Suffolk. The war continued throughout 1673, without decisive

results at sea; but on land the French invasion of Holland caused the Emperor of Germany and the King of Spain to declare war on France. The English made a treaty with the Dutch in 1674, and four years later entered the alliance against the French, who soon afterwards concluded a general peace.

The naval victories of the British in 1759 off Lagos and Quiberon are said to have reduced the French fleet to impotence, but they did not end the Seven Years' War, and peace was not concluded until 1763. The war which began in 1778 and ended in 1783 between Great Britain and France and Spain, who were assisting the Americans in their struggle for independence, was primarily a naval war; and although many naval actions were fought, and England's naval weakness enabled the United States to assert their independence, the war cannot be said to have had decisive results as between the principal parties. In the end, as has been pointed out, the British lost to France Tobago, in the West Indies, and restored all French possessions in India and the West Indies conquered during the struggle, while Spain regained Minorca and the region in North America known as Florida. It cannot be claimed that even the victory of Trafalgar, in 1805, effected more than to pave the way for the ruin of Napoleon, which was completed ten years later at Waterloo.

In the civil war in the United States of America, although the Federals possessed from the commencement of the struggle the command of the sea practically unchallenged, nearly five years of war on land (1861-65) were necessary to give them the victory over the Confederates.

Great and even decisive as was the effect of the silent pressure of the British fleet on the Germanic Empires in the war of 1914-18, yet it cannot be claimed that its unseconded power would have obliged the enemy to agree to our terms.

Naval pressure, then, is slow and partial in its action: alone it is unlikely to produce decisive results, nor will sea power be given time to weigh largely in the balance when rapid decisions are attained on land. This was the case in the Franco-German war of 1870-71, when French naval superiority exercised little or no influence on the final result. "We English," wrote Nelson in 1796, "have to regret that we cannot always decide the fate of the Empire on the sea."

On the other hand, naval supremacy does allow the nation possessing it "great liberty" of action.

In the first place, the attainment of superiority on the sea, if it does not absolutely assure the safety of overseas possessions from hostile interference, at any rate renders an enemy's naval, military, and aerial enterprises, to some extent, so precarious as to make them improbable on an important scale. Consequently measures on land and in air for local defence against attack from overseas can be reduced to a minimum, and concentration of effort on land and in air can, or should, be assured.

Further, freedom of movement on the sea will enable trade to be continued and funds, therefore, to be obtained for the maintenance of war. Advantage can also be taken of the resources of distant allies and of neutrals both to supplement our own resources in arming, equipping and feeding the nation, and to repair loss of material suffered in the field.

In the war of 1914-18, for instance, Great Britain and her allies were in a position to draw supplies from America and the East, and munitions from the United States and Japan. This enabled the armies raised by the British to be more quickly armed and equipped than would otherwise have been possible, and facilitated the maintenance of the allied forces. The losses of war material sustained by Russia during her reverses, in 1915, could also be rapidly replaced, and the Russian armies assisted in this manner to keep the field in the following year.

Against the enemy sea power may be applied in many different ways. The navy may, for instance, undertake the capture and destruction of the enemy's shipping and the ruin of his overseas commerce, and may check the importation of food or raw materials necessary for the prosecution of the war, whether carried in hostile or neutral vessels; or minor enterprises may be directed against weakly guarded outlying possessions. Again, portions of the enemy's coastline may continually be menaced with the object of containing field troops and garrisons and preventing their employment elsewhere—in fact, the enemy may be obliged to make detachments; or squadrons may be used to support local resistance to an invader, as was done by the British when

assisting the Catalans against the French troops during the war in the Peninsula; or combined naval and military attacks may be undertaken against the enemy's ports and harbours; or pressure may be applied indirectly, liberty of action for the land forces being assured by securing their transportation overseas, and the inviolability of their sea communications.

No more convincing example can be afforded of the restrictive effect of sea power on the enemy's commerce than the part played by the British naval power in the struggle against France under Napoleon, when the navy was largely employed in preventing the importation of merchandise into the ports of France and her dependents and allies. In 1806, for instance, an Order in Council was issued placing all the coasts of France and Holland, from Brest to the mouth of the Elbe inclusive, in a state of blockade. Napoleon, whose navy was no longer capable of coping with that of the British, and who was, therefore, unable to strike directly at them with his armies, attempted to retaliate by declaring the British Isles to be blockaded, and authorizing the confiscation of British vessels and British goods wherever found, and also of all vessels that had touched at any British port. To this the British replied, in 1807, by another Order in Council in which it was stated that "All the ports and places of France and her allies, from which, though not at war with His Majesty, the British flag is excluded, shall be subject to the same restrictions in respect of trade and navigation as if the same were actually blockaded in the most strict and rigorous manner; and that all trade in articles, the produce or manufacture of the said countries or colonies, shall be deemed unlawful, and all such articles declared good prize."

The success of Napoleon's policy depended on its universal acceptance, for so long as the ports even of one nation were open to British shipping, or to merchandise carried in neutral ships under British permission, the goods would eventually circulate throughout Europe. He was driven, therefore, to attempt the extension of his power over the whole of the nations of Europe, with the object of securing the exclusion of British commerce.

Spain consequently was overrun, Portugal attacked, the ports of North Germany were occupied, and finally the inva-

Restrictive effect of sea power illustrated

sion of Russia was undertaken. "Thus it was," says Mahan, "that the sea power of Great Britain defying his efforts otherwise forced him into a field of its own choosing, lured him, the great exemplar of concentrated effort, to scatter his forces, and led him along a path which at last gave no choice except retreat in discomfiture or advance to certain ruin."

The result of the action of the British and allied fleets in 1914-18 was not dissimilar. The German mercantile marine was swept off the seas, the navies of the Germanic Powers were confined to their harbours except when hurried raids were undertaken, and British and allied troops transported at will wherever required. The Germans soon found difficulty in obtaining adequate supplies of food, and petrol, and of the raw materials required for the manufacture of such necessities as clothing and munitions; and this seems to have been one of the causes that induced them to expend force in the subjugation of Serbia, which opened direct communication with Bulgaria and Turkey, and of Rumania, and in the defeat of Russia in Poland. Further, in 1917, so great had the pressure become that they were driven to an extreme measure of retaliation through unlimited submarine warfare, by which Great Britain and her allies were declared to be blockaded, and all vessels found in the blockaded area were liable to be sunk at sight.

This policy caused serious losses to allied and neutral shipping, and considerable inconvenience, and also necessitated great expenditure of effort both in anti-submarine measures and in shipbuilding to counteract its effects. On the other hand, the number of Germany's open and potential enemies received considerable accessions, for the majority of the nations still remaining neutral were alienated. The United States, China and Brazil soon, indeed, declared war on the Germans, and the majority of the South and Central American Republics severed diplomatic relations. The great effort that had been made by the Germans to avoid the consequences of the blockade, by conquering territories which might supply them with food and raw materials, was one of the causes that produced exhaustion of their man power in 1918; at the same time the arrival of large forces of Americans, whose transportation overseas they were unable to prevent, definitely turned the scale of land fighting

against the Central Powers. But it was probably the direct and strangling effect of the blockade which helped to cause the sudden and final collapse of the Germanic Powers in 1918; for although nations may be ready to submit to privations when success in the field still seems possible, few peoples will hold out against the pressure of famine when the prospects of victory have finally disappeared. The parts played by the allied navies and armies may be summed up in the words "You (the navies) gave us the enemies' armies, and we (the armies) gave you the enemies' fleets."

The actual value, in terms of land forces contained by the navy, of naval action through the menace of hostile war vessels off a coast-line, or even through the possibility that their appearance may prove the prelude of a raid or invasion, is not easy to compute.

It is said that news of British naval and military preparations prior to the attempt on Rochefort in 1757 caused every one of the French generals who held commands on the coast-line of the North Sea or Channel to fancy that his sector would be attacked. As a result of this enterprise, a coast defence force of 80,000 men was organized by the French in the following year; and though the majority were military coast guards their withdrawal from agriculture and other civil work is said seriously to have embarrassed the nation.

In 1799, during the war with Republican France, when the British fleets of about five hundred war vessels had established a marked superiority over those of the French and their Dutch allies, the available land forces of France were distributed as follows:

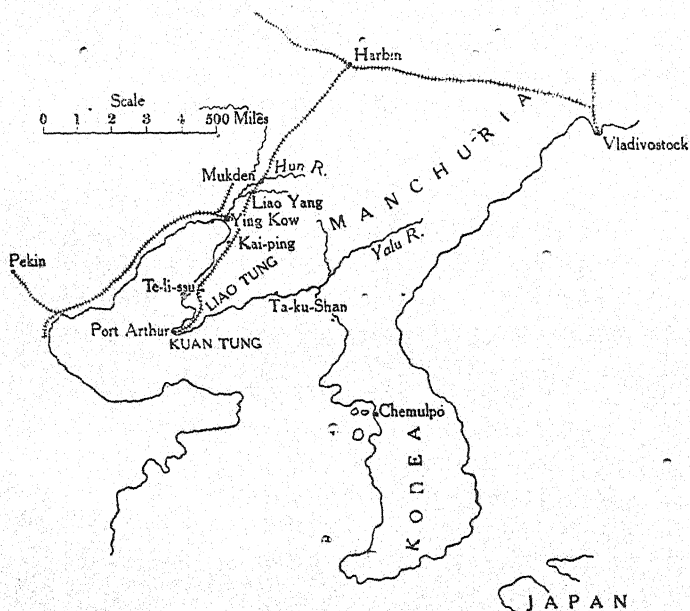
In Holland and Belgium	..	..	..	..	33,500
On the Rhine	..	..	..	..	54,000
On the Danube	..	..	..	..	82,500
In Italy	..	..	..	..	78,000
Army, called The Army of England, and troops placed on the coasts	..	..	..	..	45,500
In garrison in France	..	..	..	..	27,500
Dépôts in France	..	..	..	..	22,000
In Egypt	..	..	..	..	32,500
In hospital	..	..	..	..	42,000
Prisoners of war	..	..	..	..	13,500
Administrative troops	..	..	..	..	40,500

471,500

Instances
of land
forces
held by
naval
menace

The fleet may, therefore, perhaps be said to have contained, or helped to contain, at least 50,000 soldiers, besides those held fast in Egypt, a very respectable detachment.

The presence of the British fleet off Lisbon and the coast of Portugal in 1809 was largely instrumental in inducing the Portuguese to maintain their revolt against the French ; and the fact that a considerable French garrison was kept in Lisbon to secure it against a landing party from the fleet indirectly assisted the insurgents. Subsequently the fleet did good service for Wellington in obliging Junot to leave in Lisbon a garrison of 5000 men, when he marched, with about



14,000 men, against the British forces, some 17,000 strong, who were standing at Vimiero. (Map 8 on p. 196.)

In the Russo-Japanese War the superiority gained by their fleet gave the Japanese the power to attack Vladivostock at their pleasure. As a result, a Russian garrison of between 20,000-30,000 men was maintained inactive in this place. The weakness of the force detached by the Russians, in June, 1904, to relieve pressure against Port Arthur, was in part due to fears lest the Japanese should land troops behind it at Kai-ping or Ying-Kow. This force suffered a serious reverse at Te-li-ssu.

It has been pointed out that in 1813 there were nearly 500,000 troops in the United Kingdom. A similar policy was followed in 1917, when there were in the British Isles some 200,000 field and garrison troops, besides the numerous reserve, training and dépôt units required for the provision of drafts for the expeditionary forces and oversea garrisons. These troops, and the oversea garrisons necessary to secure territory beyond the United Kingdom against naval, or combined naval, aerial and military action represented, therefore, to our enemies the containing value, in soldiers, ordnance, and expenditure on them, of their naval and air fleets.

COMBINED OPERATIONS.

Command of the sea confers the initiative on the sea, air and land forces of the power possessing it, and leaves them great liberty of action. Within the limits imposed by geographical conditions such as the situation of suitable landing-places and harbours; by weather, by the presence of such impediments as fortifications or mine fields, and by the shipping available for transport of troops; the nation can strike when and where it pleases, and against objectives that are either of naval, aerial or military importance; and its ships will always form a "floating base" for the troops and aircraft.

In 1801 and 1807, for instance, the British, as has been pointed out, struck at the Danish fleet, and the Crimea was invaded in 1854 with the object of capturing the naval port of Sebastopol. Our latest war has seen military expeditions to Mesopotamia, Gallipoli, Salonika, Palestine, and Vladivostok; and naval requirements were partly responsible for the despatch of troops to Mesopotamia, for the security of the Karun oilfields, and to East and West Africa and the Murman coast to prevent their use as bases for enemy war vessels.

Freedom
of action
conferred
by sea
power

During the Seven Years' War Great Britain's sea power enabled a useful diversion to be made in 1761 by the attack and capture of Belleisle on the west coast of France. As a result the preparations of the French for an offensive against the Anglo-German forces standing on the Weser were disturbed and delayed, and twenty-two battalions and eight

squadrons diverted for the security of Brittany. (Map 2.) In 1814, when Great Britain was at war with the United States, sea power also enabled the British to reduce American pressure on Canada by carrying the war into the enemy's territory, the United States being invaded and Washington, Baltimore, and New Orleans attacked. (Map on p. 80.)

Sea power also affords special facilities for inflicting a surprise in combined operations, since feints can easily be made by warships to distract the enemy. Numerical superiority at the landing-place selected for a military force should, therefore, be assured, as the plans of the commander should be concealed until they are in full execution; and the enemy will consequently be obliged either to disseminate his troops, or to give up the attempt seriously to dispute landings except in localities previously fortified.

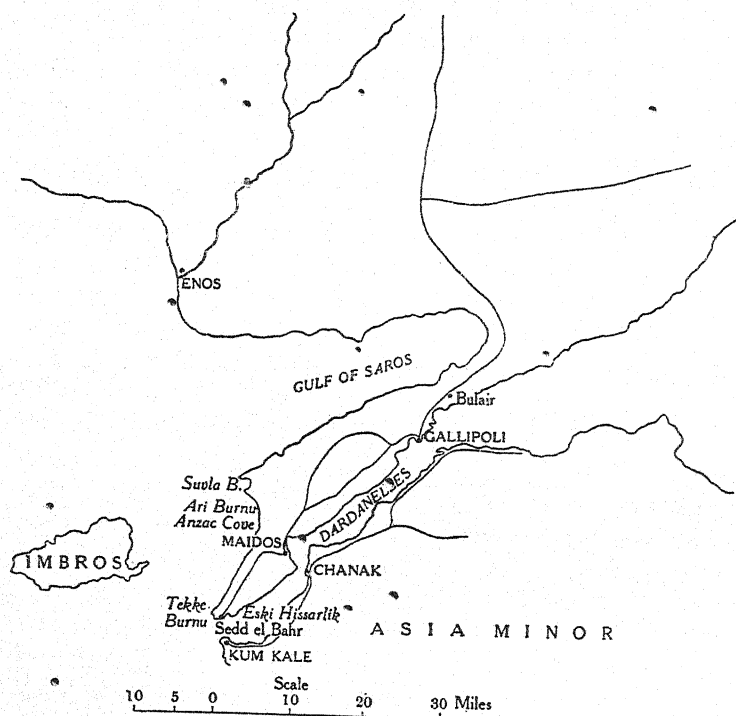
Instances
of land-
ings in
enemy's
territory

The Allies, for example, landed without opposition in the Crimea in 1854 (p. 62), as did the Japanese in the Liaotung peninsula in 1904. Wolfe effected by surprise the landing at Québec in 1759 (p. 183); and disembarkations were successfully carried out by the British, in the face of opposition, at the Helder in 1799 (p. 107), in Egypt in 1801, and at Walcheren in 1809.

The most recent example of a disputed landing operation is that at Gallipoli. The various attempts of the allied squadrons in the spring of 1915 to silence the forts protecting the Dardanelles had caused the Turks to take measures to strengthen both the Gallipoli peninsula and the Asiatic coast of the straits against an invasion; and by the time the allied attack took place the defences had assumed formidable proportions. The base of the Gallipoli peninsula was protected by the Bulair line of forts, the straits of the Dardanelles were swept by guns in concealed positions, works had been made so as to cover all probable landing-places on the peninsula, and the highlands on the Asiatic side of the straits had been entrenched; arrangements had also been completed to facilitate the transfer of troops from the European to the Asiatic side, and *vice versa*. Owing to command of the sea being held by the Allies, the Turks were in doubt as to where the British and French would attempt to disembark. The Turkish

force of between 35,000 and 45,000 men was, therefore, widely distributed, two divisions being on the Asiatic side, two north of Maidos, one at Maidos, one holding the south of the Gallipoli peninsula; and the Gulf of Saros was also guarded.

On the 18th April the Turks heard of the presence of an Anglo-French expeditionary force in Egypt, and it was, therefore, anticipated that a further effort would be made to gain the straits. After some feints by the navies the British, with



the support of the guns of the fleets, succeeded on the 25th in gaining a footing on the point of the Gallipoli peninsula, while a French force landed at Kum Kale as a diversion and withdrew on the 26th. By dint of severe fighting and with further assistance from the guns of the war vessels, a portion of the allied force comprising two British divisions, an Indian brigade and a French contingent, or some 35,000 fighting men, established itself by the 28th on a line running from a point three miles north-east of Tekke Burnu to one

mile north of Eski Hissarlik point, and thence to the Dardanelles; at the same time an Australian-New Zealand force, which had landed on the 25th near Ari Burnu, had also made good its footing. Although these positions were subsequently improved and more ground gained, the Allies were unable to clear the peninsula. On the other hand, in spite of all their efforts the Turks failed to evict the Allies, and the peninsula in the end was voluntarily evacuated, without hindrance from the enemy, early in 1916.

British
in 1882

In 1882 Lord Wolseley made able use of British sea power to outwit the Egyptians. (Map 6 on p. 144.)

The campaign opened on the 11th July with a naval bombardment of Alexandria, which was occupied by seamen two days later, the Egyptian garrison, some 5000 strong, having retired a short distance eastwards to Kafr-ed-Dauar. The navy alone being unable to spare the force necessary to secure the place against a counter-attack, troops were now hastily summoned from the Mediterranean stations, and in a few days the combined garrison was raised to 5000 men.

Meanwhile, preparations had been pushed forward for the despatch of a force of about 25,000 fighting men from the United Kingdom and India, under the command of Lord Wolseley, whose plan of campaign was based on the power of the British to transfer troops by water to the locality where it was proposed to strike the decisive blow. At the same time, by feints and diversions, the enemy was to be induced to disperse his troops and distracted from the real objective. In accordance with this plan the British commander at Alexandria was ordered to operate in such a manner as to fix the attention of the enemy on the garrison; and the first troops to arrive from England were landed there, the remainder being kept on board ship in the harbour. On reaching Alexandria Wolseley further gave out that it was his intention that one division should operate from Alexandria against the enemy's position at Kafr-ed-Dauar, while the remainder, after capturing the fort at Aboukir, which is on the coast midway between Alexandria and Rosetta, were to advance from this direction against the flank of the Egyptians. At the same time he had secretly arranged with Sir Beauchamp Seymour, the admiral in command of the fleet, for the seizure of Port Said and Suez, the two entrances

to the Suez Canal, and for the occupation of Ismailia, where it was intended to land the bulk of the army. An advance was then to be made on Cairo, after the defeat of any of the enemy's forces that might be encountered.

At this juncture the forces of the Egyptians were disposed roughly as follows: near Alexandria 15,000 men; guarding the coast at Aboukir, Rosetta and Burlus 15,000; at Damietta 7000; at Tel-el-Kebir and watching the approaches to Cairo from the Suez Canal 12,000; at Cairo 11,000. Uncertainty as to where the British blow would fall, produced by command of the sea, was therefore responsible for the dispersion of the Egyptian forces, which were weak at all points.

On the 19th August the entrances to the canal were duly occupied, and soon after daybreak everything was ready for the passage of the troop transports, which had in the meantime sailed from Alexandria to Port Said. By the evening of the 23rd 9000 men had been landed at Ismailia, practically without opposition; and on the 13th September Wolseley, with a force of 17,000 fighting men, including the bulk of the troops originally at Alexandria and a division from India, decisively defeated 20,000 Egyptians at Tel-el-Kebir, and subsequently captured Cairo.

the forces removed from Gallipoli were shipped first to Egypt, and later the majority were sent to France.

Again, an army may withdraw to suitable localities on the sea coast where ports are available from which to obtain subsistence, munitions and reinforcements, and instead of embarking may await in a fortified position a favourable opportunity to resume the offensive. Wellington, for instance, in October, 1810, retreated before Masséna's superior French army to the fortified lines of Torres Vedras. Here he remained until, a month later, difficulties as to supplies forced the French to fall back, and finally to retire in March, 1811.

Relative
value of
sea and
rail
transport

Under modern conditions, however, shipping no longer enjoys the advantages it formerly possessed in respect of the sure and rapid transport of troops over long distances, for railways can now compete with steamers on equal, or, if many lines are available, on advantageous terms in moving troops from place to place. For instance, at the time of the war in the Peninsula, 1808-1814, troops could be sent by sea from England to Portugal far more quickly than they could march from France. In the war of 1914-1918, however, in spite of the undeveloped state of the railways leading to the Egyptian front, it is probable that the Turks could, in 1916, have moved a division, with guns and transport, by rail and road from Constantinople and have concentrated it at Beersheba in about fourteen days; the line, however, must have been devoted mainly to this service, and only the minimum number of trains employed for the maintenance of other troops and for the requirements of the civil population. A division could not have been transported even from Marseilles to Alexandria by sea in less than from fourteen to eighteen days. (Map 2.)

If railway transport as well as transport by sea is required for the conveyance of the troops, the balance turns definitely in favour of railway transport alone, owing to the time consumed in embarking and disembarking the troops on and from the ships and trains. Troops, for instance, could more rapidly be sent from Flanders by rail through Belgium, Germany and Austria to Serbia than would be the case were they railed to Marseilles, then shipped to Salonika, and lastly transported by train to Serbia.

Advantage may, in certain circumstances, be taken of sea power to shorten the distances over which supplies and munitions are carried on land to the army. In this manner not only may the quantity of land transport be reduced, but the proper maintenance of the army may be rendered less difficult and precarious, because the length of the line on land liable to interruption will be curtailed. In addition, fewer troops will be necessary to guard and secure the movements of the land transport.

Shortening distances for land transport

In 1813 Wellington used this advantage in his successful march from the Douro to the Pyrenees. When south of the Douro his army drew many of its requirements from Lisbon; as it advanced arrangements were made to obtain them first from Santander, and subsequently, after its capture, from St Sebastian. (Map 8 on p. 196.)

The ports from which supplies and munitions are drawn may also be changed as found convenient. Thus, in 1914, the British Expeditionary Force drew supplies and munitions at first from Calais, Boulogne and Havre. When the Anglo-French armies were forced back beyond the Marne these ports were no longer used, and supplies, etc., were shipped to St Nazaire. The result of the battle of the Marne and the subsequent advance of the British to Ypres enabled Calais, Boulogne and Havre again to be employed. (Map 2, and Map 12 on p. 252.)

Command of the sea therefore usually confers great advantages in war; and so important is this superiority to an army operating overseas that even local and temporary loss of control over the maritime communications may enable a severe blow to be inflicted against an invader.

The campaign of 1781 affords a striking example of this danger. At the end of 1780 the British forces engaged in the struggle with the Americans and French in North America were distributed in three groups, one round New York under General Clinton, the commander-in-chief, another under Lord Cornwallis in North and South Carolina, and a detachment from New York in Virginia. The Americans were in greatest strength in the northern portion of the theatre of war.

Loss of maritime communications

The opinion of the Government as to the plan of campaign for 1781 was that the recovery of the southern pro-

the forces removed from Gallipoli were shipped first to Egypt, and later the majority were sent to France.

Again, an army may withdraw to suitable localities on the sea coast where ports are available from which to obtain subsistence, munitions and reinforcements, and instead of embarking may await in a fortified position a favourable opportunity to resume the offensive. Wellington, for instance, in October, 1810, retreated before Masséna's superior French army to the fortified lines of Torres Vedras. Here he remained until, a month later, difficulties as to supplies forced the French to fall back, and finally to retire in March, 1811.

Relative
value of
sea and
rail
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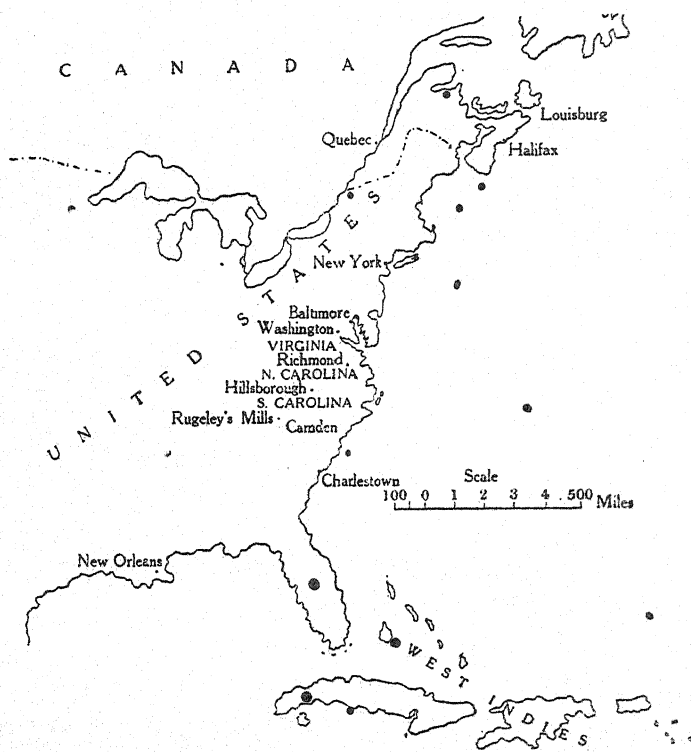
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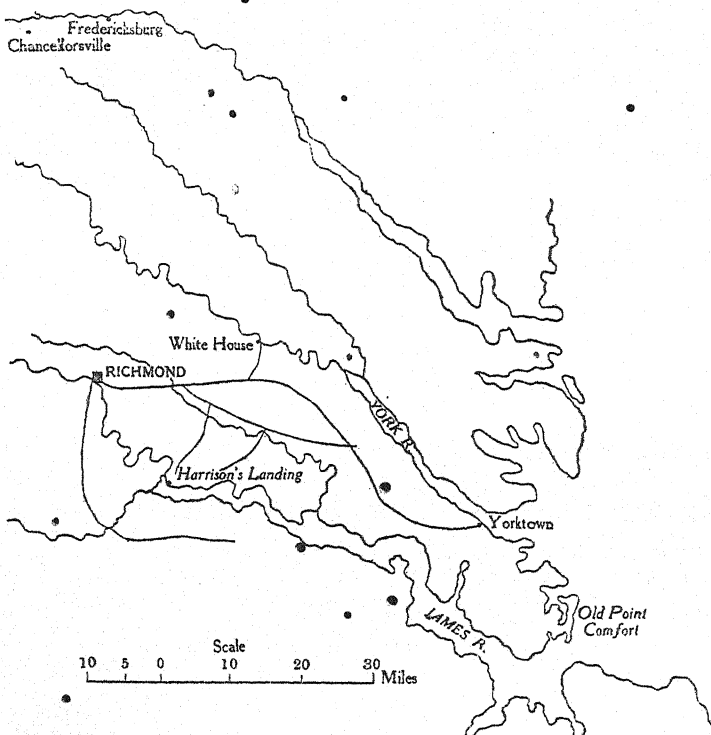
vinces, North and South Carolina, and the prosecution of the war by pushing our conquests from south to north through Virginia, were to be considered the chief objects of the British operations. In April, 1781, however, Cornwallis, who had received no definite orders from Clinton, and who believed that until Virginia was reduced the more southern



provinces, where the rebellion was kept alive by men and munitions from Virginia, could not be held, took matters into his own hands and, marching northwards with about 1700 men, joined the forces then in Virginia, which put him at the head of some 7000 troops.

The Americans now concerted with their French allies a plan calculated to take advantage of their position between the troops under Clinton and Cornwallis, and to insure the destruction of the British forces in detail. Arrangements were, therefore, first made for the French fleet of twenty-four battleships, under de Grasse, which had been operating

against the British fleet under Rodney in the West Indies, to sail to North America, bringing reinforcements from the French garrisons in the West Indian islands. These reinforcements were to be landed and to join the French detachment in Virginia under the Marquis Lafayette, who in conjunction with an American force brought by Washington from New York was to attack the British troops under Cornwallis. Meanwhile, Admiral de Grasse, after effecting a junction with a French squadron of eight battleships under de Barras, then



on duty on the North American station, was to prevent help from reaching the British from the sea.

This plan proved completely successful. Rodney, the British admiral, not expecting that de Grasse would take the whole of his fleet to North America, had detached only fourteen vessels to follow him. The result was that the French were able to concentrate thirty-two battleships against the British force of only twenty-one, and gained in September temporary control of the maritime communications.

Meanwhile, after some indecisive skirmishes, Cornwallis in July was directed by Clinton to establish a post at Old Point Comfort, near Richmond, for the protection of British cruisers. This place, however, having been found unsuitable, Cornwallis seized and began to fortify Yorktown on the peninsula between the York and James rivers. Here he was attacked at the end of September by the combined American and French forces, 16 000 strong, and being unable to obtain assistance from overseas was obliged on the 19th October to surrender.

A military force, then, sent overseas in circumstances when the power of controlling the maritime communications is doubtful, will run serious risk of disaster; for if the communications are severed, an army, which, like an individual man, is always largely dependent on outside sources for sustenance, cannot for long keep the field. Even if temporarily victorious such army, sooner or later, according to the vigour with which it is opposed, will be obliged to surrender owing to lack of ammunition, if not of stores, supplies and equipment, and to the usual waste of men that occurs in war.

The fate of the French army taken to Egypt by Napoleon furnishes a case in point. In May, 1798, he set sail with a force of about 35,000 men, carried in 400 transports, and escorted by a fleet of thirteen battleships, fourteen frigates, and seventy-two brigs and cutters, many if not all the war vessels also having troops on board.

Evading the British squadron under Nelson, which attempted to intercept him, Napoleon captured Alexandria early in July, and by the end of the month, after decisively beating the Turks, who at that time controlled Egypt, occupied Cairo. (Map 6 on p. 144.)

Meanwhile Nelson, who after visiting Egypt before the arrival of Napoleon had sailed back to Italy, succeeded at last in ascertaining the destination of the French. He therefore made again for Alexandria, and finding the French battle fleet at anchor in Aboukir Bay a few miles to the north-east of Alexandria attacked it, on the 1st August, capturing nine and burning two of the French battleships.

This reverse definitely cut off the French army from France, for Napoleon's attempt to return by land through Palestine was defeated owing to his failure to capture Acre.

In 1801 the British sent to Egypt an expeditionary force from Home and India, which, in conjunction with the Turks, obliged the French troops, now only about 23,000 strong, to surrender.

Sea power, therefore, is often a factor of great importance in operations on land; and there are few British campaigns in which the navy has not directly or indirectly contributed to the successes and the security of the armies. In fact, with the possible exception of her petty wars in India, Great Britain's plans for oversea campaigns have been and always must be based on the supremacy of the British fleets over those of the enemy.

AIR POWER.

The full development of air power cannot as yet be clearly foreseen; but even with the means now in sight it may safely be said that aircraft will also be a strategical factor of much value, not only in naval, military and combined operations, but by means of enterprises undertaken by airmen alone.

As in the case of maritime supremacy, however, air supremacy will not of itself be conclusive in war against civilized nations, unless some explosive or gas is produced which far outstrips those now in use both in power and effect. But if the use of aircraft should fail to yield results equal to the expectations that may have been aroused by their spectacular action, they may nevertheless prove to be an important item in the struggle for the attainment of success.

The principal strategic advantage resulting from superiority in the air is likely to be "great liberty of action," since a commander, while holding the power of covering the movements of his own forces, should be well informed as to those of the enemy. An air blockade, too, may be effective in hindering the movement of shipping and aircraft, and the importation of food, munitions and merchandise. Further, the enemy's naval squadrons may so continually be harassed that they may be provoked to leave the shelter of ports and harbours and forced into areas where they must accept battle in disadvantageous circumstances. On land the troops may

be so much harassed and their repose so frequently disturbed that they may be unable to march and fight with the best energy. Communications may also be interrupted, the enemy's forces broken up and portions isolated, and the transport of the men, supplies and munitions necessary for fighting efficiency rendered so precarious that the task of the troops in battle may be facilitated. In addition, the enemy's power of maintaining his armies in the field may be prejudiced by attacks on arsenals and factories resulting in their destruction, or at least in cessation of work; and the spirit of the population, on which the fighting efficiency of the troops greatly depends, may be lowered by continual raids on docks, warehouses and railway termini or large stations. The menace of attack from the air will also oblige the enemy to lock up an undue proportion of men, aircraft and artillery in passive defence, and the forces available for active operations will proportionally be reduced. Again, aircraft may be used to establish and maintain communication with troops that have been forced into positions such as that of the British at Yorktown, in 1781; since communication by air will be more difficult to prevent than by sea or land.

In warfare against savages or undeveloped nations, who will be almost powerless to resist them, attacks by numbers of aircraft will probably produce decisive effects wherever the ground is not covered with forest, and the people are within reach of an aerodrome. The swift punishment that can be given to raiding tribesmen should discourage their incursions, and the power of striking hard at the first sign of unrest and desire for aggression should prevent these from spreading to a degree that may become dangerous.

CHAPTER IV

OFFENSIVE AND DEFENSIVE IN STRATEGY.

SUCCESS in war can, as a rule, be attained only by active and not by passive measures; and a strong attack is usually the best defence.

A further advantage of the strategical offensive is that while the initiative will generally be assured surprise will be facilitated. The fact that offensive operations are undertaken will show that the nation is not in dread of its adversaries, and has full confidence in its power to obtain success; and this will react favourably on the spirits not only of the soldiers, sailors and airmen, but also of the people whose apprehensions of invasion and disaster will be allayed.

War will be carried into the enemy's country, his ports will be blockaded, and the people will at once be made to feel the full burden of the conflict, and allowed neither time nor opportunity to develop resources.

In addition, a definite plan can be followed, the co-operation of all available forces should be assured, for all can pursue one objective, and the paralysing uncertainty of being obliged to wait on the enemy's movements and then improvise counter-measures can be avoided.

Territory in the power of the invader can be exploited for the maintenance of his troops, and its resources will be lost to the defender. The effective occupation of a portion of their country will also depress the spirits of the defenders, and, since men will yield much to be rid of the presence of an invader, will constitute a good basis for negotiation when the conclusion of peace is in question.

In case of defeat the first retrograde movements of an army that has entered hostile territory will be through the enemy's country; and the inhabitants will still experience the sufferings directly incidental to war, such as are caused by measures to prevent them from hampering the troops, and by devastation of territory to hinder pursuit.

Offensive strategy is not without disadvantages.

The pursuit and defeat of the enemy's fleets, the blockade of his ports and harbours, and the shipment and security

of the armies when at sea, will impose a serious strain on the personnel and material of the naval and air forces. On land also great efforts must be made, for the employment of very large numbers will generally be necessary not only for action against the enemy's armies, but to invest fortresses or fortified areas and to hold conquered territory. Measures must be taken from the very first for the transportation of the reinforcing troops and the provision and despatch of the quantities of munitions, stores, supplies, and transport, necessary to insure the maintenance of the army, since it may be difficult to obtain even supplies and stores locally. Large sums of money must consequently be expended at once.

The exertion of prolonged marching, and the hardships and exposure that will inevitably be experienced by the men and animals, will effect their health; numbers will fall sick and will be invalided, and larger reinforcements, owing to these causes, will be required to keep the army at its proper strength. This will increase the initial strain on the national resources. To maintain communication along roads and railways, which must be used for the transport of men, material and food, and to obtain and transmit information may also present unusual difficulties, owing to the measures of the enemy and probable hostility of the inhabitants. The country people may break up and interrupt communications, and may hinder the transport of supplies, and the movements of reconnoitring detachments, and of personnel engaged in the transmission of information such as despatch riders; and they will conceal information or furnish false intelligence as to the movements of the enemy's armies.

The strategical offensive in war consequently demands not only great initial efforts but, if success is to be assured, the maintenance of these efforts throughout the contest. Large resources and their full development are therefore required.

Examples
of British
strategi-
cal policy

Owing to her naval superiority, Great Britain has usually been able to undertake the strategical offensive in wars against European nations; and naval superiority once established, her insular position has, in the past, relieved Great Britain from many of the anxieties of war, since even the defeat or loss of an army has involved consequences less immedi-

ately disastrous than have fallen to the lot of a continental power. The failure of the expedition to Walcheren, in 1809, for instance, was more a disgrace than a defeat, and except for the waste of man power, 7000 men dying and 14,000 being invalided through sickness, did not materially affect British policy.

On the other hand, in the operations on land the British have often locally adopted the strategical defensive, owing to inferiority in numbers, as happened in 1914-15 in France.

The advantages of the strategical offensive have already been pointed out in connection with the Blenheim campaign, the attacks in 1801 and 1807 on the Danish fleet, and the Jena campaign (pp. 52, 57 and 58). Advantages of strategical offensive

In 1914, by undertaking the strategical offensive, the Germans were able to subvert the plans of the French, who were also disconcerted by the unexpected strength in which the Germans were able to take the field. The Germans consequently carried their armies as far as Paris, and when defeated at the battle of the Marne fell back only a few miles to the line of the Aisne, and were not finally driven from French territory until 1918. (Map 12 on p. 252.)

The strain imposed on an army which invades and occupies an enemy's country is shown by the number of men sent to the front during the second Afghan War. At the commencement of the second stage of this war, in December 1879, about 40,000 men were detailed for offensive operations; but in August, 1880, in spite of the usual wastage due to wounds and sickness, the number of British troops in the field had increased to about 64,000. Effort necessary to sustain offensive

In the South African War, during the period between 1899 and 1902, some 500,000 men, counting in the original garrison of 10,000, were sent from the British Isles or the Oversea Dominions to South Africa, or were raised there. During the war, including units relieved or disbanded, and men who were killed in action or had succumbed to disease, and those invalided or discharged from the forces, the wastage amounted to 170,000.

In June, 1904, the Japanese forces which had invaded Manchuria included about 120,000 fighting men; at the battle of Mukden, which took place at the end of February, 1905, the number had been more than doubled.

The reasons advanced by the German General Staff for their failure at the battle of the Marne in 1914 were that the armies of the right and centre had become exhausted in consequence of five weeks' almost continuous fighting and marching. They had lost a large proportion of their effectives and were no longer in good physical condition. In consequence also of the rapid march through Belgian and French territory the measures for providing reserves of men and supplies of food and munitions were found to be inadequate.

The fighting strength of the force with which the invasion of Mesopotamia was commenced in November, 1914, was about 12,000 and the total amounted to 16,500; by December, 1915, the number of fighting men had increased to 50,000, by April, 1916, the fighting force had been raised to 122,000, or ten times that originally allotted; and at the end of 1917 the strength, including non-combatants, was 420,000. These figures leave out of consideration men required to replace battle casualties, which up to the fall of Kut-el-Amara at the end of April, 1916, had not been fewer than 45,000.

DEFENSIVE STRATEGY.

In favour of defensive strategy it has been argued that the advantages are those possessed by the second hand at cards—namely, that the defender, having observed the movements and from them fathomed the intentions of the enemy, may be able to take counter-measures which will give him the superiority.

The defender, when operating, as will usually be the case, in his own or in a friendly country, will also possess facilities for supplying his troops with munitions, stores and food, and for obtaining information from the inhabitants, which can rarely be enjoyed by the attacker. He will, moreover, to a great extent be free from the obligation of detaching large forces to guard the railways and roads used for the transportation of men, animals, and stores, etc., to the front; he can break up and damage railways and roads which may be of use to the enemy, and by destroying villages and farms prevent them from being used to shelter hostile troops; and the countryside can be cleared of supplies and animals, thus

making the subsistence of the enemy's armies a matter of greater difficulty.

Within certain limits, which will be defined by the position of the fortified districts, arsenals, granaries, industrial areas and communications of the country, and by the means at his command for transporting stores, a leader adopting the strategical defensive will not be tied to a definite line of operations¹. In addition, he may be able to prepare in advance, and on or near the enemy's probable lines of march, positions which can be avoided only in affording an opening for counter-attack, or must be attacked in unfavourable circumstances.

If, as is probable, the patriotism of the nation will enable the struggle to be continued after a reverse, the war may be prolonged. The heavy wastage of men and animals incidental to all offensive campaigns; the necessity of safeguarding the railways and roads by means of which the army is supplied, for watching or investing fortified areas; and possibly the intervention of other powers, may then so tax the resources of the enemy as to afford an opportunity for successful counter-attack, or permit of the arrangement of a not disadvantageous peace.

These conditions, as has been shown, told against the Germans at the battle of the Marne in 1914. In addition to wastage due to rapid marching, and to detachments to secure their communications in Belgium and France, the Germans were obliged to detach considerable forces to attack Antwerp and Maubeuge. Further, the movement of their left wing was delayed by the group of French fortresses on the Meuse. The French, therefore, were able to deliver so effective an attack on the German right, which had advanced through Belgium, and right centre, that the whole German army was forced to retire to the line of the Aisne. (Map 12 on p. 252.)

Some
benefits of
defensive
strategy
exemplified

In 1878, when the Russians were standing before the fortified Chatalja lines, the intervention of Great Britain and Austria enabled the Turks to obtain more favourable terms of peace (p. 63).

¹ The direction in which an army advances or operates is usually termed the line of operation.

On the other hand, the defender must usually adopt a policy of procrastination and delaying action, which may involve the abandonment of territory and its resources, thus weakening the national power of resistance and exposing a portion of the population to the full hardships of war. This, however, is preferable to the alternative of accepting premature, and therefore probably disastrous, battles in defence of territory. This was shown very clearly by the defeat of the Turks in the war in the Balkans in 1912 (p. 32), and also by the reverses experienced by the French and British forces at the beginning of the campaign in 1914 in Belgium and France (p. 87).

A defensive attitude, moreover, implies inferiority, the sense of which, by affecting the moral of the whole nation, must be detrimental to the efficiency of the armed forces. This tacit confession of inferiority may also influence the attitude of other powers, who may wish to conciliate or side with those who appear to possess the best chance of victory. The Turks, for instance, joined the Germanic Empires in November, 1914.

Even in the most favourable circumstances in regard to the acquisition of information, some uncertainty can hardly fail to arise as to the intentions and movements of the enemy. Leaders and men may, therefore, be subjected to the severe mental strain of being obliged to wait on the operations of the enemy, and, owing to the perhaps not unnatural desire of the civilian population that all localities may be secured, the leaders may be tempted into the cardinal error of dispersion of force.

Difficulty
of ac-
quiring
informa-
tion

The difficulty, for instance, of securing accurate intelligence is shown by the fact that in 1914 it was not until shortly before the action at Mons that Lord French was aware that he was confronted by three or four and not (as was previously supposed) one or at most two German army corps. The British also were hastily pushed forward to Mons to secure the left of the French armies that had been moved to the lower Meuse to the assistance of the Belgians. In spite of aircraft and other means of gaining information the British offensive in Palestine in September, 1918 was undertaken in localities where an offensive was not altogether anticipated (p. 142).

As has been pointed out, military weakness has not infrequently forced Great Britain to adopt locally the strategic defensive during some portion of each of her continental campaigns. Examples
of strate-
tical defensive

The British and German forces which served under Prince Ferdinand of Brunswick from 1759-1762, in north-west Germany against the French, were engaged in a defensive campaign in what was for the British a subsidiary theatre of operations. Wellington was unable to adopt the policy of a sustained offensive in the Peninsula during the years 1809-1812; and in France and Flanders the British were on the defensive during the latter part of 1914 and the winter and spring of 1915.

In struggles outside Europe local weakness, caused by the political necessity of leaving the power of aggression to others, threw Great Britain on the defensive at the commencement of the first Sikh War of 1845 and of the South African War of 1899. In 1812-1813 Great Britain was also obliged, owing to the weakness of the forces available in Canada, to stand on the defensive against the American troops; and the same situation developed in Egypt in 1915, where the defensive was adopted against the Turks.

CONCLUSIONS.

Striking a balance between the relative advantages of the offensive and defensive in strategy, it may be concluded that the offensive, which is the most advantageous course, will be adopted whenever the strength and preparedness of the forces of the nation render this possible.

For instance, by the unexpected rapidity and strength with which they invaded Belgium and France in 1914 the Germans, as has been pointed out, dislocated the plans of the French, much in the same way as Napoleon had upset those of the Prussians and Saxons in 1806.

A defensive attitude, to be followed as soon as possible by the offensive, will be forced temporarily on a nation when, owing to political or other reasons, the offensive cannot at once be undertaken, and time is required for the development of strength; or when the forces of the enemy are so superior that to attack is not advisable until the enemy has expended some of his strength—which will usually become evident

owing to a pause in his advance; or when the offensive must be delayed until the arrival of allies renders it practicable. A nation may also stand on the defensive in a secondary theatre of war.

The motives which led to the adoption of the defensive will affect the choice of the moment for its abandonment.

Change
from de-
fensive to
offensive
illus-
trated

Thus during the expedition to the Helder the British, having effected their landing, were obliged to stand on the defensive, and to await the arrival of their allies, the Russians, before advancing (p. 108).

Wellington assumed the offensive in the Peninsula in 1813, when the reverses of the French in Russia, and the necessity of massing troops in Germany to make head against the Russians, Austrians and Prussians, had obliged Napoleon to withdraw large numbers of troops from Spain (p. 167).

In the Crimean War the Russians took the offensive as soon as it was evident that the allies were entangled in the siege of Sebastopol, and that, therefore, a reasonable prospect existed of defeating them (p. 62).

The British undertook the offensive in the South African War when a sufficient number of troops had been collected to justify them in doing so. The Boers, on the other hand, after being thrown on the defensive, again began to attack when the British paused in their advance after the occupation of Bloemfontein in 1900.

The French and British assumed the offensive at the battle of the Marne in 1914, when the waste of war, the necessity for making detachments to secure their line of communication with Germany, and the difficulty of maintaining supplies and ammunition, had reduced the force and impetus of the German advance.

In 1916 the British had developed sufficient force in France to commence a sustained offensive at the Somme, and the offensive was continued at Arras and Ypres in 1917. In 1918, owing to the defection of the Russians, the Germans were able to mass such forces in France that the British, French and Americans were thrown on the defensive until, in July, the arrival of troops from America gave the allies such large potential reserves that the offensive could be resumed.

PLAN OF CAMPAIGN.

The only sound basis for a plan of campaign for the forces at the disposal of a nation lies in the concentration of effort to the largest extent for the attainment of the main military objective (p. 43). It is not possible in war to anticipate all the operations which must be undertaken before peace is concluded. In a plan of campaign, therefore, while general objectives should be defined, only those measures should be considered in detail which are necessary to enable the forces to undertake with probability of success the earlier operations of the campaign, no attempt being made to forecast movements subsequent to the first serious collision with the enemy.

Further, in forming a plan of campaign the military problem should be dealt with in a comprehensive spirit and as a whole. If details are first considered, not only will the main objective inevitably be obscured, but dispersion of force will result from the endeavour to arrange for the security of all interests.

Owing to the conditions of the British Empire a British plan of campaign will probably involve arrangements not only for the security of many interests but for the simultaneous execution of two or more separate military operations; such, for instance, as the despatch overseas of an expeditionary force as well as the active defence of a dependency. A general plan, as well as several separate and detailed plans, will therefore be necessary.

- The first question to be solved when framing any plan of operations is the strength and composition of the force required for the attainment of the objective: the second is generally whether this force can be concentrated in the chosen theatre of war in time to effect its purpose, and maintained during the campaign.

The answer to the first question will be governed largely by the estimated strength of the enemy's forces, and the physical characteristics and development of the area where the campaign is to take place. As regards the second, the concentration of a British force will usually involve transport overseas in the first instance, and for this quantities of shipping must be provided; for the maintenance of the force,

if at all large, a number of ships will also be needed, together with ample harbour and docking accommodation, and in addition masses of land transport for conveyance on shore.

Every plan of operations, therefore, should be based on the best procurable information as to the topography, climate, fertility, productions, and communications, harbours, rivers, railways, roads, etc., of the proposed theatre of operations. It should take into consideration our own resources as well as those of the enemy, his armed strength, the characteristics of his forces, the probable rapidity of their mobilization, concentration and subsequent movements, the numbers that can be maintained and the arrangements to repair the waste of war.

The formulation of a plan of operations involves, then, not only careful computation of relative resources and their values, but estimates as to the time required for their effective employment.

All plans should be simple, for simple plans alone have much chance of success amidst the complications and difficulties of war. "In war"—said Napoleon—"the simplest operations are the best, and the secret of success lies in simple manoeuvres and in taking measures to insure against surprise." The plans must be kept secret so as to increase the probability that the enemy will be surprised and disconcerted when they are put into execution. They must be elastic, leaving a margin for the unexpected; and since the initiative cannot always be assured, plans for offensive strategy must be capable of adaptation for defensive operations. In view of the importance of keeping the enemy in uncertainty the units composing an army should, if possible, be so disposed that, even after their general situation has been ascertained, he may not easily be able to infer the exact plan of campaign. In other words, the troops should be so placed that the bulk can readily be moved in at least two directions. If this can be devised, the enemy, as is always the case when there is choice of alternatives, will be kept in doubt until the operations have actually begun. Operations calculated to mislead and deceive the enemy may also with advantage form part of a plan, these being, if possible, such as might reasonably be undertaken with the

object of obtaining decisive success, and as would therefore for a time bear the stamp of reality.

The localities selected for the assembly of an army should, further, be easy of access by road and rail, and where facilities for supply exist; and should also be where its movements are not likely to be interrupted by an attack, special measures being taken by means of covering troops to insure early information as to hostile operations, and the protection of the main body. It is most important that the forces should be well placed for mutual support, that, if possible, the flanks should be secured by physical obstacles, fortresses or neutral territory, and that rapid concentration for battle should present no difficulties.

Unless the army is sufficiently large not only to guard the whole frontier effectively but also to enable force to be massed where it is desired to strike decisive blows, the troops should not be spread out in long lines. "Those who attempt"—wrote Napoleon—"to defend a frontier by an extended line or cordon of troops will find themselves weak at all points, for everything human has its limits; artillery, money, good officers, able generals, all are limited in action and quantity, and dissemination everywhere implies strength nowhere." And again: "The people of the frontier provinces must not be alarmed when certain localities which formerly were garrisoned are no longer occupied. If they look about them they will see masses of men who are more formidable because concentrated, and are ready not only to defeat hostile raiders but to carry war into the enemy's country."....."Troops should be so disposed that whatever the actions of the enemy our forces can readily be concentrated."

The troops, then, should in principle be so placed that they may be able to guard directly districts the inviolability of which is of political or industrial importance, and in the case of operations overseas the port or ports where disembarkation was effected. They should also be able to act in combination with one another, and should be ready for either offensive or defensive operations, as commanders can rarely be certain of gaining the initiative.

A plan of operations, however, will rarely fulfil all the requirements of theory, and in most cases a considerable

margin must be left for the unforeseen, and something also to chance. Since it will usually be impossible to satisfy every requirement, the less important must be disregarded. Attempts to compromise in this respect will generally result in failure.

The exact nature of a plan of operations will depend on whether the offensive or defensive is primarily contemplated.

DEFENSIVE PROJECTS.

If a defensive attitude is at first to be adopted, the military adviser of the government, or commander in the field, as the case may be, should, as has been pointed out, be on his guard against yielding to the pressure which is certain to be brought to bear on him to disseminate troops with the object of securing territory and local interests. It is very evident that concentration of effort is the sole means of attaining success when acting on the defensive; and that not only is it impossible for the enemy to be present in strength in every locality, but that to follow a policy of dispersion will be directly to play into the hands of the attacker, who will be afforded the opportunity of beating the defender in detail.

It has already been explained that the consideration of details to the exclusion of the main objective is likely to produce disastrous results. This is especially the case when a defensive plan of operations is in question. For instance, if when considering arrangements for the defence of a country, a commander first allots the garrison required to secure each locality, should it be attacked, he will soon find that his force has been so distributed that while there are troops everywhere, at no point are they in sufficient strength to insure effective resistance. As Frederick the Great remarked—"He who seeks to hold everything will end by losing all."

The dispositions to be adopted when on the defensive will necessarily be governed by the object immediately in view. As the operations will, in a greater or lesser degree, depend on those of the enemy, little can, however, be done beyond fixing the initial dispositions of the troops. A force acting on the defensive will usually be inferior in numbers to the enemy,

and if so will probably either rely for success on rapid movements made with the object of attacking and beating his armies in detail; or will endeavour to hamper and delay the movements of the enemy pending the arrival of reinforcements, or the intervention of allies.

In the first case the troops should be assembled where good communications are available, and also where either natural obstacles, such as rivers, canals, and ranges of mountains, or fortified areas, will break up the cohesion of the enemy's masses and afford favourable opportunities for attack. In certain circumstances, also, the areas over which the enemy may advance may be devastated, which will add to his difficulties.

When the object is to gain time, the troops immediately available may be distributed so as to cover important localities, and also to give the impression of greater force than is actually available, and in this way to mislead the enemy. To this end every use should be made of natural obstacles, and they may also be created by the destruction of communications and devastation of territory. Areas may, in addition, be fortified, but when these are held, care should be taken that power to manœuvre is retained, and that the localities selected are such that the forces cannot be ignored by the enemy except when affording a favourable opportunity for counter-attack, such for instance as occurred in Napoleon's campaign in 1814 (p. 227). The importance of good communications is perhaps greater than in other operations, as success may largely depend on power to manœuvre rapidly, and while harassing the enemy to avoid decisive actions.

If the defence of a coast-line is in question the object will generally be to attack and beat the enemy while he is engaged in landing, and when many of his troops are still on board ship. The forces, therefore, will as a rule be in localities from which probable points of disembarkation can quickly be reached.

In 1810, before the French under Masséna invaded Portugal in overwhelming force, Wellington arranged that the country in their line of advance should be cleared of population and supplies, giving directions that "The moment the enemy crosses the frontier the governor of the

Wellington's
plan for
defence of
Portugal
in 1810

province of Estremadura must be told that it is necessary to order all carts, carriages, and other means of conveyance, with all the provisions they can carry, away. He ought to have all his arrangements prepared for ordering them off as soon as the French approach." At the same time Almeida and Elvas, fortresses on the principal roads leading into Portugal, were repaired and garrisoned, and entrenched positions prepared on the river Alva at Ponte Murcella, and on the Zezere river. (Map 8 on p. 196.) The fortress of Abrantes, where a bridge of boats spanned the Tagus, was also strengthened; and lastly the lines of Torres Vedras were constructed near Lisbon. The bulk of the army was at Guarda; Trancoso and Viseu, covered by advanced troops on the Agueda; a Portuguese brigade held Castello Branco; Hill with 12,000 men was at Portalegre; and the Spaniards watched the frontier from Perales southwards.

Plan for
defence of
Egypt in
1916

Local requirements may, however, necessitate certain modifications in the application of the principles that have been stated above. In 1916, for instance, when it was anticipated that an attempt to invade Egypt would be made by a Turco-German force, it was of great importance to insure that the enemy should not interrupt traffic through the Suez Canal. At the same time it was considered desirable to subject the Turks to the disadvantage of being obliged to advance over the few and comparatively waterless routes that follow the coast of the Mediterranean or traverse the Sinai peninsula. The British forces, therefore, were to have been somewhat widely distributed, a line of fortifications being planned in the desert ten or twelve miles east of the canal, and along this line the troops were to be disposed as follows. On the right were to be three divisions, with a proportion of cavalry, in the area from Suez to Kabrit; the section from Kabrit to El Ferdan was allotted to a similar force, and on the left from El Ferdan to Port Said were also to be three divisions with mounted troops in addition. As the best-watered routes led to the left of the line, Tel-el-Kebir was selected as the position of the reserve, which was to have consisted of two divisions. From Tel-el-Kebir troops could also readily be moved by rail to any portion of the front. (Map 6 on p. 144.)

PLANS FOR THE OFFENSIVE.

When the offensive is contemplated, which will usually be the case when our forces are equal or superior to those of the enemy, our own aims should be uppermost in our minds, and estimates as to the enemy's intentions, and probable movements, the forces he can bring and maintain—and he must be given credit for sound dispositions—and the attitude of neutrals should be secondary considerations. If the enemy's probable operations are first considered, the tendency will be to adopt a mentally defensive attitude, which will be reflected in the plan.

The advantages to be gained should be emphasized rather than the obstacles to be surmounted, and the enemy's difficulties should be considered rather than our own. It must be remembered that the enemy will probably be more afraid of us than we of him, and that success is attained by concentration of effort and by a bold rather than a cautious policy.

Generally speaking arrangements will be made to land in or advance into hostile territory at a point where an effective blow can be struck at interests of importance to the enemy. If a landing is unnecessary the troops will usually be placed as near to the enemy's frontier as considerations of safety will allow, for the enemy's country can then rapidly be invaded, and the time allowed him for preparation will be curtailed. The area selected for this purpose should be one possessing well-developed communications to the enemy's territory so that the troops may be able to move in the most suitable formations or directions, and in order that the transport of munitions, supplies, and reinforcements may be facilitated. There should also be few natural or artificial obstacles, such as large rivers, mountain ranges or fortified areas on the line of advance.

Wellington's proposals for the campaign of the allies in 1815 illustrate the principles to be observed in both defensive and offensive projects.

In March, 1815, after the return of Napoleon to France, the great Powers of Europe entered into an agreement each to place 180,000 men in the field against him; and while

Wellington's plans in 1815, and those of the French in 1914

the other armies were to assemble on the general line of the Rhine preparatory to the invasion of France, the British and Prussians were to concentrate in Belgium as a covering force. (Map 7 on p. 178.)

At the beginning of April, of the forces raised or subsidized by Great Britain the Anglo-Hanoverians were assembling about Ath, and the Dutch-Belgian troops about Nivelles; of the Prussian forces one corps had reached Charleroi and the remainder were moving up from the Rhine. At this juncture, in the course of a discussion regarding the future operations of the Anglo-Dutch-Belgians and Prussians, Wellington proposed that the allies who, for the moment, were on the defensive, should be so disposed as to be able to meet any sudden stroke on the part of the French, information of whose numbers and intentions was of the vaguest character.

It was considered that the Emperor Napoleon might first attempt to drive the allies back on Brussels and Ghent, in order to gain the great political advantage of obliging the courts of the King of the Netherlands and of Louis XVIII, the King of France, respectively, to leave these cities. In the circumstances, and in deference to political exigencies, provided that these did not involve the sacrifice of vital military requirements, Wellington proposed to quarter the bulk of the Anglo-Dutch-Belgian army, then about 50,000 strong, and the 30,000-40,000 Prussian troops that had reached the Meuse, in such a manner that the two forces could easily concentrate south of Brussels. The allies would then be in a position directly to oppose the French should they advance on Brussels by the easiest and most natural line, the interval between the Sambre and Scheldt, and could also indirectly protect the concentration of the other armies.

As larger numbers became soon afterwards available, Wellington submitted a further project for an immediate advance with such portions of the allied armies as were at disposal. It was now proposed that the initiative should be seized, with the object both of rousing and assisting the French malcontents to revolt against Napoleon; of taking advantage of the detachments which the Emperor had been obliged to make to quell Royalist risings in the south and west of France; of preventing the organization and levying

of troops; and finally of upsetting and anticipating the plans of the French.

The Anglo-Dutch-Belgian army, which would be 60,000 strong, and the Prussian army, which would be of about the same strength, were to invade France early in May, advancing through the area between the Sambre and Meuse. At the same time the Austrian and Bavarian forces standing on the middle Rhine, and probably 150,000 strong, should march forward through Luxemburg. The whole should then move on Paris through the territory lying between the Meuse and Oise.

These forces would, it was calculated, be superior in numbers to those at the disposal of the Emperor; and in these circumstances, and having regard to the political situation in France, it was thought that the allies might reasonably hope for victory.

This plan was not adopted owing to the opposition of the Austrians and Russians, who wished to postpone the commencement of hostilities until June, when the armies of all the allied powers would be ready to take the field, and the French could be crushed with certainty by the simultaneous advance of some 650,000 men.

The troops in Belgium were therefore obliged to remain on the defensive. Forming an advanced mass covering the concentration of the remainder, they were disposed along a somewhat extended frontage much in the manner originally advocated by Wellington. In view of the large armies that were assembling on the Rhine the possibility of a long retrograde movement seems hardly to have been contemplated, and few if any arrangements were made against such a contingency. It appears, however, to have been generally understood that if forced to retreat the British should fall back on Holland and in such direction as to secure their communications with the sea, while the Prussians would withdraw on Liège and Maastricht, and if necessary on Juliers.

The problem which confronted the French in 1914 on the declaration of war by Germany was so to dispose their troops, and also the small contingent that could be furnished by the British, as not only to watch the movements of the Spanish, whose hostility was improbable, and of the Italians, whose attitude was more doubtful, but also to be prepared to secure

France
in 1914

France against direct invasion by the Germans and to guard against an indirect advance through the neutral territories of Switzerland or Belgium. (Map 2 and Map 12 on p. 252.) Notwithstanding the political disadvantages incidental to the violation of a small neutral country, this alternative could by no means be disregarded owing to the strength of the groups of fortresses round Belfort, Epinal, Toul and Verdun, which lay opposite to the German frontier and could be avoided only by moving through Switzerland or Belgium. Further, without violation of neutral territory, the Germans would at first be unable, owing to lack of space, to deploy more than a portion of their forces, and in these circumstances would not only lose the advantage of such numerical superiority as could be brought to bear against the French, but would run the risk of envelopment as their leading troops drove forward. Also, even supposing that the armies could have burst through the French frontier defences and spread out beyond them, it is doubtful whether they could have been maintained by means of the comparatively few railways leading directly from Germany to France. The direction taken by the principal railway lines in Germany, and the extensive station and siding accommodation that had been laid along the Belgian-German frontier, pointed to the probability of the violation of Belgium rather than Switzerland, should Germany decide to adopt this policy; and the French laid their plans accordingly. It was resolved to employ the large majority of their forces against the Germans, and to dispose the troops so as to cover the whole Franco-German frontier, but with the power to extend the line northwards, if necessary. They would also, if possible, disturb the plans of the Germans by an offensive into Lorraine, where the inhabitants were favourable to France, and success, therefore, would be politically advantageous; and where the topography was more favourable for a successful attack than that of the rugged Vosges mountains, which form the western border of Alsace.

THE STRATEGICAL CONCENTRATION.

The first move in the execution of a plan of campaign for operations on land is to despatch the troops from their peace stations, or from places where units have been collected

and brought to war establishment, that is, places of mobilization, to localities whence operations can be commenced with advantage.

"The process by which an army is brought into the theatre of operations is called the strategical concentration. This is effected by sea, by rail, by water or by road, or by a combination of these means¹."

In the case when a British force is to operate beyond the confines of the Empire, the first movements of concentration will involve a voyage, except when the operations are to be carried out from British territory, or territory under British protection possessing land frontiers, such as India, Canada, or Egypt. It will always be completed by road, rail, or water.

TRANSPORT OVER THE SEA.

Unless superiority over the naval forces of the enemy exists, or has temporarily been attained, the despatch of an army overseas involves serious risk of interception during the voyage, or, if this is avoided, of subsequent isolation, as is shown by the French expedition to Egypt in 1798 (p. 82). In war, however, every operation involves risk, and those who are not prepared to hazard something can never achieve success. The question for decision must always be whether the advantages to be expected from the particular venture are such as to justify the dangers.

For example, in 1757, during the course of the Seven Years' War, it was decided that the British should undertake the capture of the French fortresses of Louisburg and Quebec. (Map on p. 80.) To this end Lord Loudoun, the British commander in North America, was to collect a force at Halifax, while a reinforcement of some 7000 men was to be sent from England to the same place, escorted by a large squadron under Admiral Holbourne. Loudoun accordingly concentrated 5000 men at New York in April, and here he awaited news of Holbourne before venturing to set sail for Halifax, since the British naval force in American waters was small, and there were rumours of the arrival from Europe of a number of French war vessels.

Examples
of move-
ment of
troops
oversea

¹ Field Service Regulations.

Although nothing had been heard of Holbourne, while it was known that at least five French battleships were off the coast, Loudoun, at the end of June, resolved to proceed to Halifax, as further delay would involve inaction during the whole of the campaigning season then drawing to a close. Accordingly the expedition put to sea with no larger escort than one small battleship and four small cruisers, and arrived safely at Halifax, where there was a garrison of 2000 men. Soon afterwards Holbourne came into port, his departure from Europe having been delayed in part by contrary winds, partly by the dilatoriness of the Government in providing troops and equipment for the expedition.

Having in hand a fleet of seventeen battleships and sixteen cruisers, and about 14,000 soldiers, Holbourne and Loudoun sent out reconnaissances to obtain information as to the situation at Louisburg; and now it was discovered not only that the garrison was 7000 strong, but that no fewer than eighteen battleships and five cruisers were lying in the harbour, where they had arrived at about the time that Loudoun was leaving New York.

In these circumstances the enterprise was abandoned, the bulk of the troops being safely escorted back to New York by the squadron under Holbourne.

It has already been pointed out that in 1798, in spite of Britain's naval superiority, Napoleon ventured to set sail for Egypt, where he arrived in safety.

Such was the apparent superiority of the fleets of the Allies which escorted and carried their armies to the Crimea in 1854, that the Russian squadron in the Black Sea, consisting of fifteen battleships and other vessels, did not dare to leave the harbour of Sebastopol, where it was watched by but one British vessel. (Map on p. 62.) Actually a very considerable risk was run by the Allies, for the French war vessels, fifteen battleships and a dozen steamers, as well as the eight battleships and three steamers of the Turks, were so crowded with troops as seriously to prejudice their fighting efficiency; further, only ten British battleships and seventeen smaller vessels could have been spared to engage the enemy, from the duty of escorting the British transports, one hundred and fifty in number.

The fleets of the Russians and Japanese were practically

equal at the beginning of the Russo-Japanese war in 1904, Russia having seven battleships, eleven cruisers and twenty-five destroyers in the Pacific, while the Japanese could dispose of six battleships, six first-class cruisers, fifteen second-class cruisers and nineteen destroyers.

In the first naval engagements, three large Russian vessels were damaged, and two small ships sunk. The Japanese, content with this small margin in their favour, at once began to transport troops to Korea.

In 1914 the superiority of the British fleet enabled the Expeditionary Force to be transported rapidly across the Channel, four divisions being concentrated near the Belgian frontier within a period of eighteen days, while a fifth division reached the front within three weeks of the declaration of war.

DISSEMBARKATION.

An army which is to operate overseas cannot be reasonably sure of keeping the field until access has been obtained to a harbour, available in all weathers, where reinforcements, munitions, and stores can securely be landed, and where the sick and wounded, and in fact everything calculated to encumber the movements of the troops, can be embarked and sent home.

When the strategical concentration can be effected in British territory, or in that of a friendly nation, this can be arranged with comparative ease, suitable harbours, such as Havre, Calais and Boulogne, which were used in 1914, being employed for the disembarkation. From these movement by road or rail to the zone of concentration will present no special difficulties.

If the direct invasion of an enemy's country is in question, the first requisite will, generally be to set ashore a force sufficient to secure a suitable inlet, or haven, well placed for operations against the chosen objective, and if possible possessing wharves and facilities for handling traffic.

Since these localities will usually be fortified, at any rate against attack from the sea, or if not fortified will at least be garrisoned, the actual operation of landing must, as a rule, take place on an open beach, preferably within easy distance of an inlet or haven.

Setting aside the dangers incurred on account of mines and the possible intervention of the enemy's warships, submarines and aircraft, the disembarkation of a force on the coast of a hostile country is necessarily a slow and precarious military undertaking. Even when the most modern appliances are available for disembarkation, and support can be afforded to the troops as they land by aircraft and by the guns of the vessels escorting the transports, a landing can only be considered as a difficult and hazardous venture. While it is in progress such troops as are on the ships or in boats will be powerless for attack or defence; and in most latitudes unfavourable conditions of weather may at any moment cause the disembarkation to be suspended, when the units ashore will to a great extent be isolated.

Provided, therefore, that the beach is sufficiently near a suitable port or inlet, it is very desirable that a locality should be chosen where the chances are favourable to the disembarkation of a proportion of the invading force without serious opposition from the enemy's troops ashore. And since such points are more than likely to be watched, endeavours will usually be made by means of false attacks to mislead the enemy as to what is intended, and in this manner to effect a landing by surprise.

In the case of the landing at Gallipoli in 1915, for instance, the allies made a feint towards Enos, and also landed troops at Kum Kale on the Asiatic coast to distract the attention of the Turks. (Map on p. 75.)

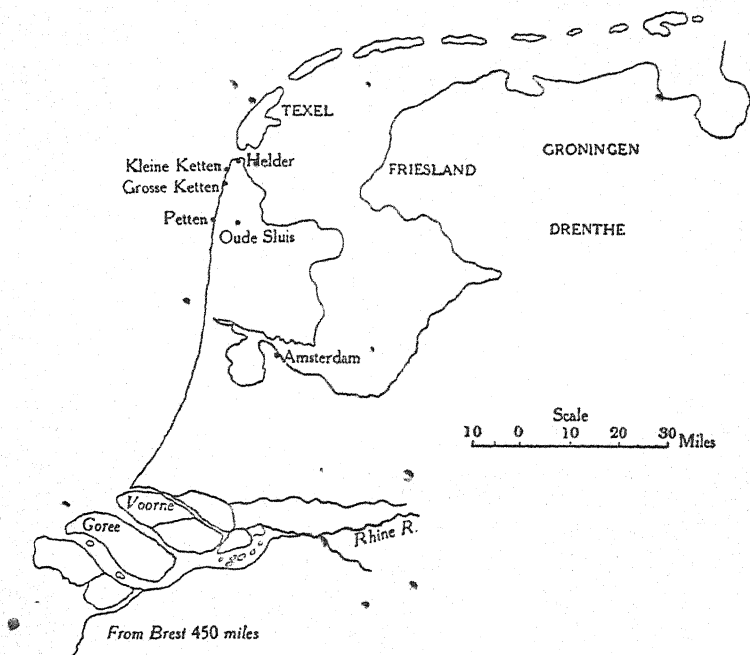
The fighting troops considered essential to drive away the enemy's local forces, and to secure the necessary harbour, having been disembarked, its capture will be the next objective. When this has been attained, the concentration of the forces can be carried out in localities suitable for defensive measures, until sufficient numbers have been landed to justify an advance.

GENERAL DISPOSITIONS OF THE TROOPS.

The fate of a campaign, especially when large forces are in question, may be greatly influenced by the dispositions made in the strategical concentration.

Even with the assistance of railways masses of men move so slowly that much time will be required before dispositions

once made can materially be changed, and units transferred to other localities or theatres of war. As the subsequent operations of an army, therefore, will largely be influenced for good or for evil by its strategical concentration, it follows that, as pointed out by von Moltke, errors in the strategical concentration will rarely be retrieved during the course of a campaign; for it is not so much "positive force as relative situation" that leads to victory. In fact the old maxim holds good that *in bello non licet bis errare*.



The expedition to the Helder is an instance of disembarkation and strategical concentration in hostile territory. In 1799 the British Government resolved to despatch a force of 13,000 men to Holland, from which, in co-operation with 17,000 Russians, they were to drive the French, and at the same time effect a diversion in favour of the Austrians, who were attacking the French in Switzerland and on the Rhine. At the beginning of August a British division accordingly put to sea under General Abercromby in one hundred and thirty transports, with an escort of fifteen battleships and forty-five smaller vessels commanded by Admiral Mitchell.

Examples
of strate-
gical con-
centra-
tions
The
Helder
in 1799

The instructions given to Abercromby were that, if possible, Goree and Voorne were to be captured. Should this be impracticable, he was to seize the island of Texel and the Helder, or to occupy Gronigen, Friesland, and Drenthe. To conceal the objective of the expedition, British cruisers were to display great activity along the whole coast of Holland and France, from Texel to Brest.

After consultation with Mitchell, Abercromby decided to attack the Helder, which could be isolated if a disembarkation were successfully made on the sandy stretch of coast between Grosse and Kleine Ketten. The fleet accordingly steered for the Helder, arriving off the coast on the 21st August.* Owing to a gale the disembarkation could not be commenced until the 27th, so that ample time was afforded to the enemy to concert measures of opposition.

In spite of a vigorous resistance by a force of 12,000 Dutch the British, with the support of the guns of the fleet, effected the landing. Thereupon the garrison of the Helder, 2000 strong, fearing that they might be cut off, evacuated the place, which was occupied by the British, thirty-two Dutch war vessels falling into their hands.

After receiving a reinforcement of 5000 men, and obtaining locally a small quantity of transport (none having been brought from England), Abercromby took up a strong position from Petten to Oude Sluis, on the edge of the area of marsh and dyke which extends southwards to Amsterdam. Here he proposed to await the arrival of the Russians and of reinforcements from England. A strong attack by the French and Dutch was repulsed on 10th September, and soon afterwards, with the advent of 12,000 Russians, and of the reinforcements from England which raised the strength of the British to 33,000 men, the strategical concentration may be said to have been completed. As was usual, however, in the case of British operations undertaken at this period, the force was far from being in fit condition to take the field, for the troops were badly equipped, there were but few administrative units, and little or no land transport was available.

Meso-
potamia
in 1914

The concentration was again made in the enemy's territory in Mesopotamia in 1914 (Map on p. 171). The force originally allotted for this expedition consisted of one divi-

sion, or about 12,000 fighting men, which was intended to secure the oil-fields on the Karun river, whence oil was obtained for naval purposes. About the middle of October an advanced guard consisting of 3500 men with a few guns was sent from Bombay up the Persian Gulf; and on the 6th November, the day after the declaration of war on Turkey, these troops landed at Fao, with the support of the guns of a warship which silenced the Turkish fort. Having destroyed the fort, the British proceeded up the Shatt-el-Arab and disembarked on the right bank on the 9th and 10th, opposite Abadan island, and near the terminus of the oil pipe line from the Karun; and on the 11th an attack by the Turks was repulsed. About 5000 additional troops, under General Barrett, arrived on the 14th, and the next day 1200 of the enemy were driven to an entrenched position some miles up the river. On the 17th this was captured from the Turks and Arabs, who were 5000 strong, and Basra was occupied on the 22nd November. Here the concentration was completed and an advance subsequently made to the Karun.

The South African War and the second Afghan War furnish examples of a strategical concentration in British territory, the former being for defensive operations, the latter for invasion of Afghanistan.

At the commencement of the South African War, in 1899, the British forces available for the defence of Natal and Cape Colony, whose frontiers marched for 1000 miles with those of the Transvaal and Free State, comprised some 16,000 regulars and 3000 local troops in Natal, and 6000 regulars and 4000 local troops in Cape Colony. (Map 4 on p. 128.) The numbers at the disposal of the Boers were believed on the other hand to amount to 50,000 fighting men; and there were known to be in British territory many sympathisers with the Boers, who would not hesitate to join them if the opportunity occurred.

The position of the British was therefore one of difficulty. With inferior forces they must not only gain time for the arrival of reinforcements, and prevent the enemy from invading British territory and arousing disloyalty among such of the inhabitants as were of Dutch extraction; but must also endeavour to facilitate the eventual adoption of the offensive by securing important points near the frontier, such as railway junctions and bridges over large rivers.

In the circumstances these objects could be attained only by a daring policy, in the hope that this, combined with the fear of the unknown which is always an important factor in war, might cause the enemy to delay his advance sufficiently long to enable the British to oppose it with effect. It was therefore decided to place the available troops at various important points near the frontier, the bulk being concentrated in Natal, which was thought to be in most serious danger of invasion. Along the Natal frontier, moreover, were difficult mountains the passage of which would probably oblige the enemy to break up his forces into small bodies, without cohesion, and would give the British an opportunity of beating them in detail.

The troops were consequently disposed as follows:—In the Cape Peninsula, to secure the port of Cape Town, and at Stellenbosch, 600 regulars; at De Aar 1800; at Orange River Station 1600; at Kimberley 500 regulars and certain local troops; at Mafeking local troops; in Rhodesia local troops; at Naauwpoort 750 regulars; at Stormberg 750 regulars; and in Natal there were 16,000 regulars and local troops in addition. The remainder of the local troops were posted along the various railway lines.

The Boers invaded Natal and Cape Colony, but did not penetrate in force south of the Tugela in Natal, nor further than Sterkstroom, Colesberg and a few miles beyond the Modder in Cape Colony.

Afghani-
stan in
1878

In 1878, the British force destined to undertake the invasion of Afghanistan was disposed as follows:

At Peshawar there were 16,000 men, ready to advance through the Khyber pass and along the Kabul river, and there was a reserve of 5000 men for this column at Hasan Abdul; at Kohat there were 7000 men destined to move up the Kurram valley; at Multan 7000 men, increased subsequently to 11,000, who would march through the Bolan pass to Quetta; and at Quetta an advanced guard of 5000 men on the road to Kandahar through the Pishin valley.

The strength of the various columns was governed primarily by the number of men that could be maintained along the different lines of advance. But the troops were so placed that invasion of the enemy's territory could at once be undertaken in force sufficient to overcome such resistance

as would probably be encountered; and at the same time the most frequented routes leading eastwards into India would be secured. The columns moving via the Khyber and Kurram could advance on Kabul, the capital of Afghanistan, and those by the Bolan and Pishin valley on Kandahar,



the most important town in southern Afghanistan. They could, therefore, advance towards localities which the enemy would probably be obliged to defend, and consequently where his main forces would be encountered.

In the Waterloo campaign the strategical concentration, ^{Belgium in 1815} which was at first defensive, was effected in friendly territory, the Anglo-Dutch-Belgian army, under Wellington, and the Prussian army, under Blücher, assembling in Belgium.

• As has been pointed out (p. 100), the dispositions of the allied armies were governed by conflicting requirements. From the military point of view it was essential that the troops should be so placed that the armies could concentrate for battle more rapidly than the enemy could close with either force; also that they could advance readily when the time came for the invasion of France. On the other hand, for purposes of maintenance it was desirable that they should be widely distributed. Again, the necessity of securing the routes by which munitions, supplies, men and horses were received respectively from England and Prussia pointed to a certain dissemination; but the political desirability of protecting Brussels and Ghent indicated

concentration, and necessitated the location of the troops in positions near the frontier and consequently exposed to attack.

In circumstances of this nature the best alternative is, as has been suggested, to disregard the less important requirements: the allies however effected a compromise.

In March, 1815, when Napoleon returned from Elba to France, there were in the Low Countries about 40,000 Anglo-Dutch-Belgian troops, supporting the authority of the newly installed King of the Netherlands, an area then comprising the modern Holland and Belgium. Of these troops the British, including the King's German Legion, in all some 12,000, were for the most part in Antwerp, round Ath, and at Tournay, which was being placed in a state of defence. The remainder were distributed either at Brussels, Louvain, Maastricht and Namur; or in small bodies at Ostende, Ypres, Mons, and Ghent, where the works and fortifications were being repaired. In addition there was a force of Bavarians and Würtemburgers between the Moselle and the Meuse; at Coblenz, Aix-la-Chapelle, and Crefeld, were the nuclei of three Prussian corps, and Cologne was garrisoned by 14,000 Saxons. (Map 7 on p. 178.)

Later, when the army had been augmented by the arrival of 25,000 men from England and by a few troops from Hanover, Brunswick, and Nassau, the Anglo-Dutch-Belgians were drawn generally eastwards and back from the frontier, while the German troops moved up to within supporting distance of them. About the second week in April the armies were disposed as follows:—Anglo-Dutch-Belgian troops amounting to 12,000 men, and including six British battalions, were on garrison duty at Antwerp, Ostende, Nieuport, Ypres, Tournay and Ghent; the 2nd Corps, 28,000, lay in the area Audenarde-Grammont-Ath; the 1st Corps, about 30,000 strong, was in the region Enghien-Braine le Comte-Nivelles; the Cavalry, 8500, was round Grammont-Mons and Ninove; the Reserve (25,000) was quartered at Brussels and Hal. The Prussian army, under Blücher, stood with the 1st Corps, 32,500, round Charleroi; the 2nd Corps, 32,500, near Namur; the 3rd Corps, 24,500, in the vicinity of Liège and subsequently at Ciney; the 4th Corps, 31,000, at Diékirch in Luxemburg but destined for Liège.

The allied troops therefore covered Brussels and Ghent, and the roads along which munitions and supplies would arrive respectively from the ports of Antwerp, Ostende and Nieuport, or from the Rhine via Juliers. The total frontage occupied, however, was extensive, amounting to about 100 miles: concentration even on their common centre could not be made in less than about four days, and should the French attack the centre or outer flank of either army the other could not readily afford assistance. The armies were also standing close to the frontier, and opposite a line of French fortresses whose garrisons rendered reconnaissance difficult and precarious, and therefore screened the movements of the French troops. Moreover, owing to the existence of a marshy tract of country to the south of Wavre, the concentration of the allied forces in the area lying southwards of Brussels would present serious difficulties, unless effected by the roads which meet at Quatre Bras. Since these ran parallel to and only a few miles from the frontier, the probabilities were against their remaining under the control of the allies should the French invade Belgium. Even should the allies succeed in concentrating for battle in the district south of Brussels, their situation would be the reverse of advantageous. In case of defeat here the armies must either retire in different directions for subsistence, the Prussians on Juliers, the remainder towards the sea, thus rendering themselves liable subsequently to be crushed in detail: or if they remained together and fell back on Brussels, each would experience great difficulty in obtaining supplies and munitions along roads which from their course, and from the fact that they would not directly be protected by the allied armies, would be liable to be occupied by the enemy's mounted troops. Should the allies fail to concentrate south of Brussels, and find themselves forced to effect a junction and to fight a battle near or to the north of this city, their situation would be equally disadvantageous if beaten. Owing to the absence of good roads in the area to the north-east of Brussels, the whole force would in all probability be forced to retire northwards, and away from Juliers and the middle Rhine, and the burden of supplying both armies would fall on the British, whose commissariat would hardly be able to stand so great a strain.

On the other hand the position of the allies was not

without advantages. In front of their right flowed the Scheldt, the points of passage over which were secured by fortified places held by the allies, such as Tournay. Ath and Mons, standing at junctions of roads leading to the allied centre, had also been strengthened by field works, and their capture would therefore delay the advance of the enemy. The remainder of the front was protected by the Sambre and the Meuse, large rivers with but few points of passage and these for the most part in the possession of the allies; and south of the Meuse lay the rugged region of the Ardennes, ill adapted for military operations on a large scale.

The allies, then, if attacked either at their common centre or at either flank of the combined front, might hope to delay the enemy sufficiently long to enable the bulk of the troops to concentrate for battle in the area south of Brussels. In addition, the possession of the river crossings over the Scheldt, Sambre and Meuse would be of assistance in preventing the enemy from ascertaining their dispositions, and would facilitate an advance when the time came for invading France.

France
in 1914

In 1914 the strategical concentration of the British was also effected in friendly territory, the troops being disposed in accordance with the plans of our allies the French.

The considerations governing the concentration of the French forces in 1914 have been outlined (p. 101). Generally speaking the troops in the front line were so disposed that, while immediate invasion of German territory in Lorraine could be undertaken, all lines of invasion by which the enemy could advance directly into France were covered. There was also a reserve in a position from which it could readily be moved to increase the strength of the blow in Lorraine, or could fill any gaps in the line caused by the necessity of extending the armies so as to cover the Franco-Belgian frontier.

The first concentration was, therefore, made as follows. An Alsace group of nine divisions assembled near Belfort; then came the 1st army of eight and the 2nd army of thirteen divisions, extending as far as Pont à Mousson and destined to advance into Lorraine; the 3rd army of eleven divisions stood in the Woevre round Verdun; the 5th army of nine divisions watched the Ardennes and prolonged the line to Maubeuge, and territorial troops were in the areas between Maubeuge and the coast. The 4th army was in reserve behind

the left centre of the line and near Châlons, and the British were being moved to the Channel ports (Map 12 on p. 252).

As soon as news was received of the German invasion of Belgium, the 5th army edged to the north-west so that its right rested at Dinant and its left extended along the Sambre as far as Charleroi; the 4th army moved forward into the place evacuated by the 5th; the British Expeditionary Force of about 70,000 fighting men was ordered to prolong the left of the French 5th army to Mons; and a group of French Reserve and Territorial divisions was brought up to the neighbourhood of Arras and Lille to protect the left of the British. The troops, therefore, were now so placed as to cover almost the whole Franco-German and Franco-Belgian frontier and were at the same time ready to advance and meet the enemy.

The measures taken by Napoleon, in 1815, and by the ^{Napoleon} Germans, in 1918, illustrate the policy of keeping the enemy ^{in 1815} in uncertainty as to what is in contemplation. In 1815, for instance, the French troops on the western frontier were placed as follows. There were 22,000 men on the frontier of Savoy; 10,000 at Belfort and 17,000 in Alsace were watching the upper Rhine; of the troops that fought at Waterloo the 4th corps, 16,000 strong, was near Metz, the 3rd corps, 19,000, near Rocroi, the 6th corps, 10,000, round Laon, the 2nd corps, 24,000, near Avesnes, the 1st, 20,000, near Valenciennes, and the Guard, 21,000, at Paris and Compiègne. Napoleon, therefore, could readily concentrate either against the British (who were south-west) or the Prussians (who lay south-east of Brussels) or against the common centre of the two armies near Charleroi (Map 2 and Map 12 on p. 252).

In the spring of 1918 the German front extended along ^{Germans} a general line from Nieuport by Armentières, Lens, Vermand, ^{in 1918} La Fère, north of Reims to Verdun, and thence south-eastwards to the vicinity of Mülhausen. By concentrating troops at such places as Cambrai, St Quentin and Laon they were able to keep the British (who were facing them in the areas north of La Fère) and the French (who held the rest of the line) in doubt as to the point where they would attack. Eventually on the 21st March the blow was delivered against the British front between Arras and La Fère, and the British right was forced back almost to Amiens.

CHAPTER V

THE BASE AND LINE OF OPERATION.

IN its widest sense the term *base of an army* may be applied to the areas from which the resources necessary for the prosecution of a war are drawn; and these may comprise not only the whole of the national territory and possibly that of allied nations, but even, in some cases when neutral resources are used, the territory of neutral nations in addition. Thus in the war of 1914-18 the British Isles were the ultimate base not only of the Imperial forces, but in certain particulars of allied forces also; and while Turkey was largely based on the Germanic Empires for munitions, Germany obtained raw materials from Turkey. The British drew munitions from the United States during the period when they were neutral, and both Great Britain, and Germany obtained raw materials, such as iron ore, from neutral nations.

In a more restricted sense the term is also commonly applied to the locality, or localities, which may be called the immediate bases, where magazines of supplies and munitions are accumulated and maintained under military management and control; where trained soldiers, animals and transport are sent from home or are collected to meet immediate requirements in replacing wastage in the field forces; where hospitals and convalescent depôts are placed; and from which the evacuation of sick and wounded, and of material that cannot be repaired at the front, takes place. In the case of a British campaign involving a voyage overseas, these localities usually coincide with the ports of disembarkation, and are often behind the area of strategical concentration. In a campaign from some portion of the Empire, such as India or Egypt, which possesses a land frontier, the immediate base is frequently in the area where the strategical concentration was made, and at some point such as a railway, road, or river junction, where the collection and distribution of personnel, animals and material will be facilitated.

It will be evident that, to meet the requirements of large

forces, an immediate base or bases situated on the sea coast must possess ample dock as well as rail and road accommodation, since supplies and munitions for millions of men cannot be handled and transported from an open beach or restricted harbour. Similarly immediate bases situated inland must possess well-developed communications, a sufficient number of warehouses and sheds for the storage of munitions and supplies, and adequate accommodation for hospitals and for reinforcements and transport.

The direction in which an army or group of armies advances from the area of strategical concentration is usually termed *the line of operation*; so that if troops advance from two or more different directions there are two or more lines of operation and two or more bases.

In the South African War, for instance, there were at first two lines of operation—one from Cape Colony, the other from Natal, and four immediate bases—Cape Town, Port Elizabeth and East London for the Cape Colony line, and Durban for the Natal line. (Map 4 on p. 128.) In 1808 Moore used two lines of operation from Lisbon and Corunna, both were employed in his advance and the second in his retirement. (p. 156). In 1814, however, Wellington operated along one line from St Sebastian, and the neighbouring ports, into France. (Map 10 on p. 226.)

Lines of
operation
exempli-
fied

In the great war with Germany in 1914-18 the British, generally speaking, used one line of operation for the forces in Belgium and France, extending from the French Channel ports of Dunkirk, Calais, Boulogne and Havre.

LINE OF COMMUNICATION.

As with the term *base* the expression *line of communication* is used in a multiple sense. It may be employed with reference to the railways, roads and waterways which connect allied nations or between belligerents and neutrals; or to those between the immediate and ultimate base or bases; or again to those connecting an army with the localities, such as industrial districts, whence important requirements are drawn. Such, for instance, were the sea routes in the war of 1914-18 from the Continent to England and from England to the United States, the railways and waterways from

Turkey to the Central Powers, and the railways from the German front in France to Essen. Or it may be used of the routes, connecting the immediate base or bases with the area of active operations, along which are sent the personnel, animals, material, supplies, and stores required for the maintenance of an army.

Importance of securing international, etc., communications

Few nations are self-contained as regards the exacting requirements of modern war. If, then, the communications can be interrupted between a nation and the dependencies or allied or neutral states from which munitions, food, or raw materials are drawn, a serious situation will be produced, and the nations' power of continuing to fight will be reduced in proportion as reliance is placed on these sources of supply. It has therefore not been unusual for a nation to try and isolate its enemy.

For example, in the war of 1914-18 the British brought severe pressure to bear on the Germans and their allies by preventing communication overseas except with the Scandinavian nations; and one of the factors contributing to the final collapse of the Germans was the surrender of their Austrian, Bulgarian and Turkish allies. The Germans also attempted by means of their submarines to sever the sea communications of the Western nations.

Conversely, it will be advantageous for the closest possible communication to be opened and maintained between allied nations; and one of the motives underlying the expedition to Gallipoli, in 1915, appears to have been the desire to establish a route by which easy and uninterrupted communication could be maintained between the Western Powers and Russia. This was not possible either through Archangel, which was closed by ice for many months in each year, or the small and isolated ports on the Murman coast, or by Siberia. (Map I.)

The importance of preserving communication between the ultimate and immediate base is shown by the fate which overtook the French army in Egypt, in 1801 (p. 82); and it is clear that a modern army will not keep the field if separated from an industrial area, such as that of Essen, whence its munitions are drawn.

Work of supplying an army

The work carried out on the lines of communication for the maintenance of an army resembles the measures that are

taken for the supply of a city. No large and closely grouped community such as exists in a great city can be self-supporting as regards the requirements of daily life. Although many of these requirements may be produced within its precincts, much must be brought by road, rail, ship, and perhaps air also, from districts outside and possibly at a distance. Similarly an army in the field cannot carry enough to meet all its requirements for any length of time, for this would involve the provision of such quantities of transport as would both render distribution difficult and put an end to mobility.

This is clearly shown by the delay caused in the operations even of the small force of 30,000 men, under Sir Redvers Buller, at Spion Kop, in 1900, by the transport which moved with the troops. (Map on p. 200.) It is related in the British official account of the war that, when crossing the Tugela throughout the night of the 17th and during the whole of the 18th January, the spans of shy, clumsy oxen—the transport consisted of about 650 wagons drawn by 15,000 oxen—were coaxed and flogged across the bridges, while the infantry brigades which had marched over early on the 17th, lay idle on the north bank and the enemy improved his defences. Early on the 19th an attempt was made to move the transport over Venter's Spruit, but the road was so bad and the drift so difficult that ten hours after leaving camp only a few wagons had crossed the Spruit. The attempt was then abandoned.

Instance
of delay
by trans-
port

The daily requirements, therefore, of a modern army are sent up to the troops, as they push forward along the line of operation, in quick-moving railway and mechanical transport working on the lines of communication.

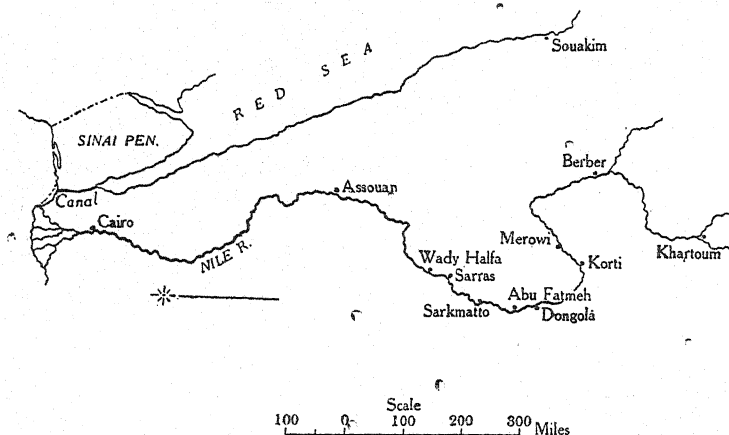
Equally, a force cannot, without hampering its fighting efficiency, carry with it sick and wounded men and animals, and damaged material. To leave them behind would probably involve the continual detachment of troops for their care and security, and this would constitute an unwarrantable drain on the fighting force. These casualties must therefore be evacuated to the lines of communication, where hospitals and workshops exist for their reception, and thence, if necessary, home.

Formation of depôts

As an army advances and the lines of communication are lengthened, reserves of men, animals, supplies, ammunition, stores, etc., are collected at depôts situated at convenient points along them.

This arrangement is adopted because goods, etc., can be sent more conveniently and with greater punctuality and certainty from points comparatively close to the armies than from distant places; and reliance on one long channel of supply from the bases direct to the troops, would render even its temporary interruption a serious matter.

The most advanced of the large depôts, which may hold supplies and stores, etc., sufficient to maintain the army for from fifteen to thirty days, are generally in localities called *advanced bases*; and are, as a rule, where goods, etc., can reach



the troops in one or two days, being sent either direct to the units, or passed through local accumulations known as "*dumps*" or sub-depôts.

Advanced bases should necessarily be where facilities are available for distribution as well as defence, for example at road or railway centres, and on or behind rivers which have been crossed by the army. The roads and railways on the bank nearest the base would then to a great extent be secure against interruption by land troops, at any rate, since to reach them the enemy must risk the passage of a river probably possessing but few bridges. If so placed, an advanced base can often be used effectively as a pivot of operations in any direction, the army thus gaining for a time great liberty of action.

In the Nile expedition of 1884-85 for the relief of Khartoum the line of communication was about 1200 miles long. The base was at Cairo, and there were intermediate depôts at Assouan, Wady Halfa, Sarras, Sarkmatto, Abu Fatmeh, and Dongola, and advanced bases at Korti and Merowi.

Examples
of local
lines of
com-
muni-
cation

In the South African War Bloemfontein and Ladysmith were the advanced bases for the Cape Colony and Natal lines of operation, and Bloemfontein and Pretoria were both used as centres of operations. (Map 4 on p. 128.)

Early in 1918 Basra was the base of the British force in Mesopotamia, and Nasariyeh and Baghdad advanced bases. Intermediate depôts were established at Kurna, Amara, and Kut-el-Amara, and sub-depôts at Sanawa, Shinafieh, Hilla, Museyib, Mufrez, Falujah, Samarra, and Bakubah. Baghdad was organized as a centre of operations on a radius from Bakubah to Hilla. (Map on p. 171.)

CHANGE OR INTERRUPTION OF LOCAL LINES OF COMMUNICATION.

The accumulation of reinforcements and horses and of large quantities of transport, supplies, munitions, and stores at a base and along a line of communication, as well as the formation of hospitals and convalescent depôts, is necessarily a matter of time; while provision for the despatch of requirements and the evacuation of what is superfluous will necessitate the organization and collection of quantities of railway and road transport.

Even a voluntary change of an immediate base and its line of communication is therefore obviously a serious matter, for the collection of supplies, etc., will again be necessary, as well as arrangements for their despatch along fresh routes, and for the evacuation of casualties to new hospitals and convalescent depôts. It is clear, then, that a most dangerous situation will arise if an army is separated by the enemy's army for any length of time from its line or lines of communication; since not only will the inflow of requirements essential for its existence be checked, but difficulties will arise owing to accumulation at the front of what is superfluous and should be evacuated.

The larger the force the greater will be its difficulties; and since an army of any considerable size cannot possess the collective mobility calculated to enable it to march round an intercepting force, it will as is subsequently explained at greater length (p. 136) probably be disastrous for a large army to be driven away from its local lines of communication, and separated from its immediate bases.

Instances of interruption of local lines of communication After his defeat by Napoleon at Marengo, the Austrian commander, Melas, finding his communications cut by the French, agreed, for instance, to abandon the whole of Piedmont and the Milanese and to retire behind the Mincio (p. 203).

On the other hand a small body of troops can usually regain its communications by a rapid march, as did Soult in 1809 (p. 254).

Since the interruption of the lines of communication is likely to be disastrous, it follows that, so far as operations on land are in question, the more numerous the immediate bases and lines of communication the better, because the separation of a force from several lines of communication will obviously be a matter of great difficulty. On the other hand, it is essential that the army shall not be weakened to a dangerous extent by the withdrawal of troops and aircraft from the fighting line to secure an undue number of lines of communication against interruption by the enemy, or by hostile inhabitants.

An army which is fighting in its own country is evidently well placed so far as bases and lines of communication are concerned, for many portions of the territory are potential bases, and every railway is a potential line of communication, while measures need only be taken to secure them against the enterprises of the enemy.

A force operating overseas, which possesses control of the maritime communications and the use of a number of ports in the theatre of operations, enjoys similar advantages.

Coastal
bases

This is shown by the campaigns, in Spain, of Moore in 1808 and of Wellington in 1813, and by that of the British in 1914 (pp. 77 and 79). In 1862, in the Civil War in North America, the Federal General McClellan's immediate base

during his advance from the coast against Richmond was Yorktown and his advanced base White House. He, however, formed an alternative base at Harrison's Landing, on the James river, with a view of discounting a contingency, which actually occurred, that his army would be cut off from White House (Map on p. 81). The Federals were consequently able to withdraw to Harrison's Landing, where the army eventually reembarked.

When invading from a land frontier an army may insure the same liberty of action as one operating from the sea coast, provided that the frontier is extensive, and a number of bases have been formed and lines of communication arranged.

At the beginning of the war of 1806 between France, and Prussia and Saxony, the bulk of the French troops stood in Bavaria, and while the Saxons were mobilizing the main Prussian army was near Naumburg. The Emperor Napoleon now laid out lines of communication for the French army, from Maintz, via Frankfort and Würzburg to Bamberg; from Mannheim to Würzburg; from Augsburg to Würzburg; and from Ulm and Augsburg to Bamberg. Advanced bases were also formed at Forcheim, Bamberg, and Kronach. (Map 3 on p. 124.) The French, therefore, could operate either in a northerly or an easterly direction, without uncovering one of the groups of communications. In other words, if Napoleon advanced in a northerly direction his operations would tend to secure the lines from the Danube from hostile interference, and also to a certain extent the line from Mannheim; while if he marched eastwards he would directly protect the lines from Maintz and Mannheim.

Example
of use of
extensive
frontier

STRATEGICAL FORMATIONS.

Speaking generally, the dispositions adopted by an army when moving from the area of strategical concentration may be linear, deep, or in echelon.

When the formation of an army is linear, the bulk of the troops march on a common frontage. Formations in depth include orders of movement in square, lozenge, diamond, or column formation. In echelon the larger units are disposed in somewhat similar fashion to the steps of a staircase, the

leading echelon, or top step, being thrust forward either from the centre or flank of the army.

Owing to the time required to move troops laterally from one locality to another, or to change dispositions, the strategical formations of armies are largely governed by those adopted in the strategical concentration; and, as has been pointed out, these depend to a great extent on the relative strength and efficiency of the opposing forces, on the time available for concentration of force, and on whether offensive or defensive operations are intended. Strategical formations will, however, also be influenced by the character of the leader, whether daring or cautious; by such considerations of policy as the necessity of covering certain areas; by the nature of the country, whether fertile or barren, the number of roads and railways leading in the required direction, and the distance they are apart; and by the information available in regard to the enemy.

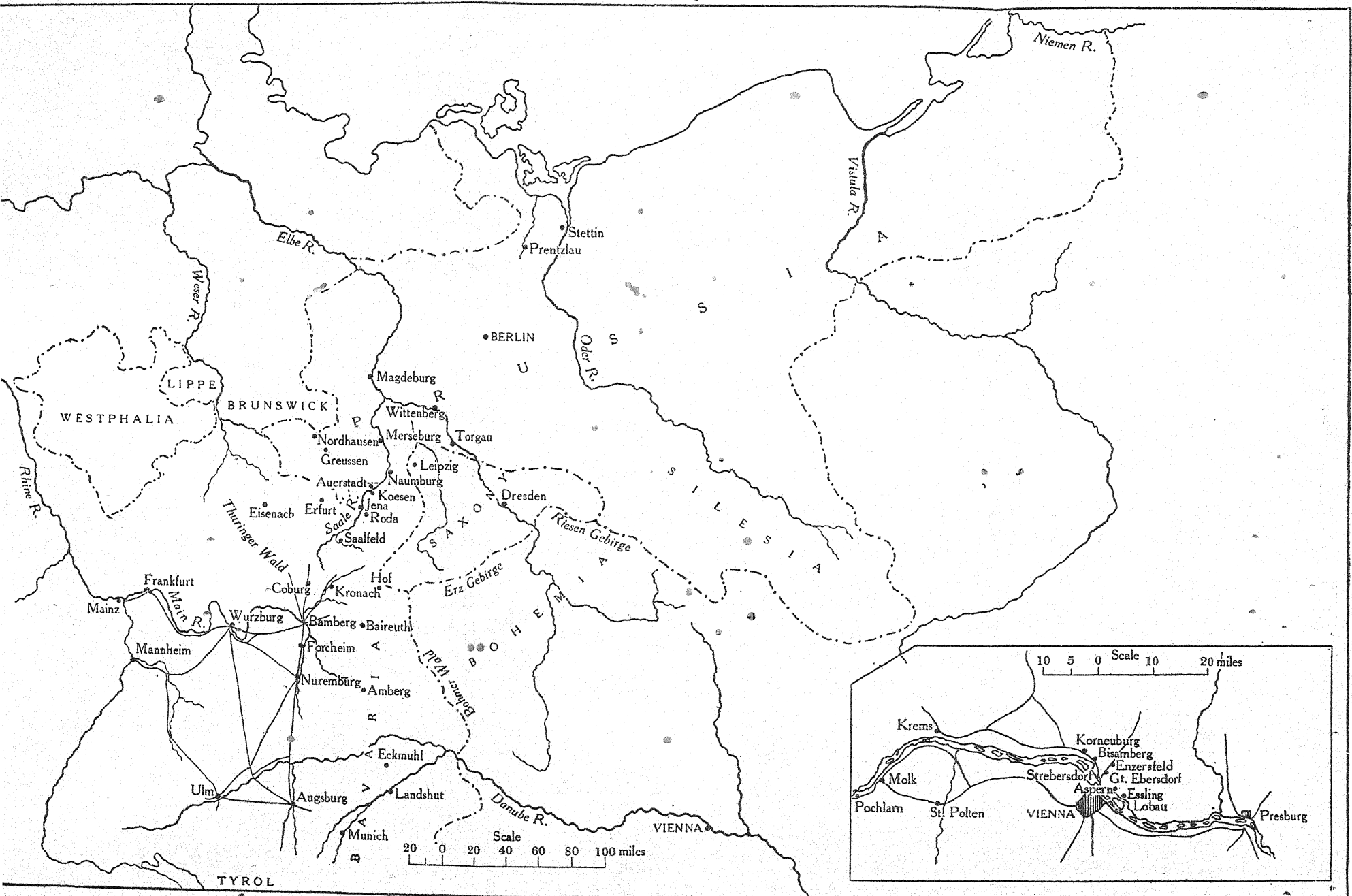
Battle is clearly the decisive event in war. The strategical formation should therefore be such as to enable the commander rapidly to make advantageous dispositions for engaging the enemy.

For battle troops must be closely concentrated, whereas for convenience of movement and of maintenance, and also to prevent the enemy from ascertaining the point to be attacked, it is desirable that they should march or be disposed in separate groups. There is therefore a conflict of interest which in practice it is no easy matter to reconcile.

Examples
of forma-
tions

For instance, much difficulty was experienced in feeding the Austrian army of 210,000 men, which for about four days prior to the battle of Königgrätz, in 1866, moved and stood in concentrated formation suitable for battle; and the Germans are said to have met with similar experiences among the troops that were crowded in July, 1918, in the salient extending from Reims by Château Thierry to Soissons. (Map 12 on p. 252.)

On the other hand, in the campaign of 1813 in Germany, Marshal Oudinot advanced with a French army of about 80,000 men in three columns on Grossbeeren, along roads separated from each other by marsh and woodland. His centre column, 30,000 strong, was attacked and beaten by



a superior force of Swedes and Germans, and the whole army was obliged to retire.

Again, an army may be so closely concentrated that the movements of the troops will become slow and difficult, and risk will, therefore, be run of defeat. Bazaine's French army, of about 150,000 men, when attempting to retreat, in 1870, from Metz along two roads, was not able to cover more than ten miles during the first thirty-six hours of its march. It was consequently intercepted by the Germans, invested in Metz and forced to capitulate.

LINEAR FORMATIONS.

Envelopment is clearly one of the most effective means of insuring the ruin of the enemy's army, for when complete envelopment can be effected the enemy must surrender, as was the case with Mack's army in 1805 (p. 137), and the Turkish army in Palestine in 1918 (p. 142). Even partial envelopment, as was shown in the Vittoria campaign (p. 167), is usually most advantageous, since, when this has been attained, the enemy must generally withdraw with heavy loss so as to avoid being surrounded.

The linear formation, in which the units of an army march on approximately the same alignment and along several parallel routes, possesses the advantage that on the one hand convergent action with the object of enveloping the enemy's forces is facilitated; and on the other, owing to the extent of frontage occupied by troops employing a linear order of march envelopment by the enemy will be a matter of difficulty. Maintenance, too, will be relatively easy, for many roads will be used and will therefore be available for the passage of transport vehicles, collective rapidity of movement will be assured, and the operations will be simple in character.

Apart from these advantages, linear formations will in principle usually be adopted by very large armies, because these alone will permit of the effective employment of the masses of troops available. At the same time the troops will probably be disposed in greater depth in areas where it is proposed to take decisive action, which will usually be where numerous roads and railways will enable force to be developed and success exploited.

In 1914, for instance, the German Armies moved in linear formation. The 1st Army, which was on the right of the German advance through Belgium, and was destined to envelop the left flank of the French and British forces, is, however, said at first to have consisted of fourteen active and reserve infantry divisions, the 2nd Army, which was next to the 1st, comprised twelve, and the remainder from seven to ten active and reserve infantry divisions, besides cavalry.

When few roads are available, as in a mountainous country, formations in line are as a rule more advantageous than those in depth. For example, it may be impossible owing to the difficulty of deploying for the troops in rear of an army which is moving in deep formation through mountains to exercise any influence on actions in which the leading troops are engaged. On the other hand, although a force marching in several columns is also exposed to defeat in detail, there is greater probability that the whole of the troops will produce some effect on the course of a battle, either by fighting, or indirectly by menacing the flanks of the enemy's forces. In addition, a success achieved by one of the columns may and probably will cause the retirement of the enemy, especially when, as will often be the case, the security of the line of retreat of some other portions of the enemy's force is endangered by its operations. This is shown by the successes of the Prussians when invading Bohemia in 1866 (p. 238).

The disadvantages of the linear formation are that lines are relatively weak at all points and manœuvre is difficult. The line is therefore either liable to be broken by an attack by superior numbers concentrated against some portion; or it may be possible for the enemy so to dispose his troops that one part, a flank for example, of the line can be attacked in superior force and beaten before the remainder can come to its assistance. In other words, an opportunity may be afforded to a commander of beating the enemy in detail.

Disadvantages
of linear
formations
illustrated

On the 10th March, 1900, after the British successes at Paardeberg and Poplar Grove, Lord Roberts resolved to march his army of about 32,000 men in linear formation from Poplar Grove on Bloemfontein. (Map 4 on p. 128.) It was proposed to push past a force of 5000-6000 Boers, known to

be at Abraham's Kraal, and rapidly gain Bloemfontein, the possession of which would facilitate the establishment of railway communication with Cape Town and the maintenance of the force.

The troops were to march as follows :

Left composed of		Centre composed of		Right composed of	
6th divn. 1st		9th divn. Gds. brig.		of 7th divn. 3rd	
cavy. brig. &		2nd cavy. brig. &		cavy. brig. &	
one mounted		two mounted		one mounted	
infantry battn.		infantry battns.		infantry battn.	
10th March	Baberspan .	Driefontein		Petrusburg	
11th March	Doornboom	Aasvogel Kop		Driekop	
12th March	Venter's Vallei	Venter's Vallei		Panfontein	
13th March	Leeuberg	Leeuberg		Venter's Vallei	

During the first day's advance the left encountered a body of the enemy in position at Damvallei, and Driefontein, who were not evicted until after a sharp action.

The plan said to have been adopted by the Germans for the invasion of France in August, 1914, involved a wheel to the left by the 3rd, 2nd and 1st Armies, numbering about thirty-four divisions, with a due proportion of cavalry, which marched through Belgium. These were to pivot on the 4th, 5th and 6th armies, of about twenty-nine divisions, besides cavalry, which were to advance through the Ardennes and Luxemburg, and also from Lorraine. (Map 12 on p. 252.)

The operation was at first successfully carried out; and early in September the German 1st Army was marching with its right at Crecy-en-Brie, covered by a flank guard near Nanteuil. At the same time the 2nd, 3rd, 4th and 5th Armies were advancing along a line extending generally from Montmirail by Sommessous, Vitry le François, Triaucourt to Verdun, the 6th and 7th Armies and other troops being on the left flank.

The Germans appear to have been aware that bodies of French troops were standing north of Paris, but seem to have thought that they were in the main composed of Territorials, whose military value was not considered to be of much account. In reality Marshal Joffre, the French commander, had daringly weakened his forces in Alsace and Lorraine so as to provide a strong nucleus of first-rate troops for the formation of a French 6th Army of active and reserve units, and this army was now on the outskirts of Paris ready to attack the German right. At the same time the British were

to the south of the Grand Morin, and the remainder of the French Armies were facing those of the Germans.

Joffre now seized the opportunity which had been offered to him of enveloping the enemy's right. Orders consequently were issued for the 6th Army to advance on the 6th September from the line Dommartin—Claye, while the British were to establish themselves on the line Changis—Coulommiers and be prepared to move on Montmirail. The French 5th Army, which was on the right of the British, was to advance from the line Courtaçon—Sézanne, the 9th Army was to secure the marshes of St Gond, and the 4th and 3rd Armies to hold the front as far as the fortress of Verdun.

The battle resulted in a victory for the French, and the Germans fell back behind the Aisne.

The drawbacks inherent in linear formations are also illustrated by the defeat of the Italians at Custozza in 1866, and by Oudinot's reverse on the 9th December, 1813 (pp. 231 and 124).

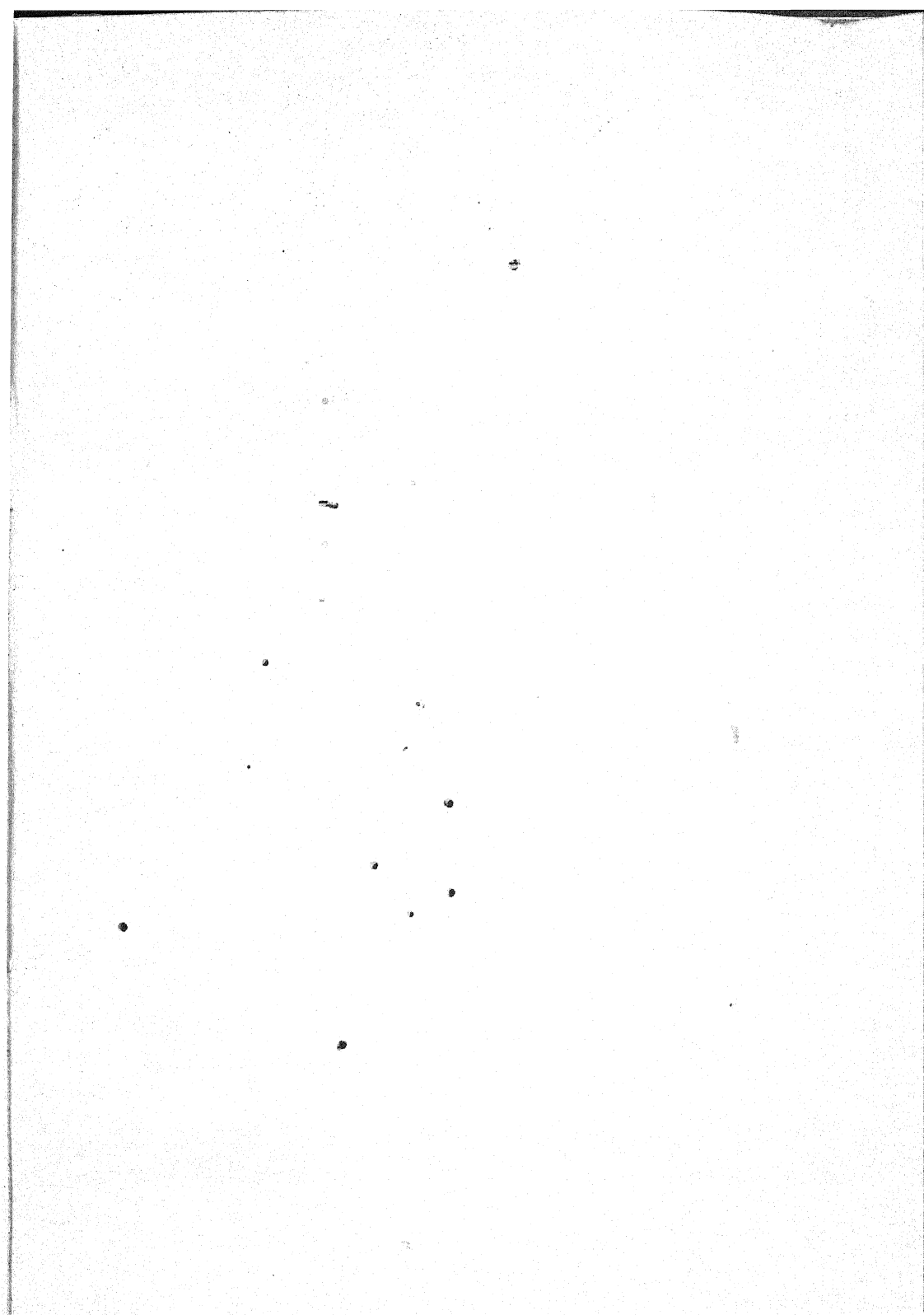
FORMATIONS IN DEPTH.

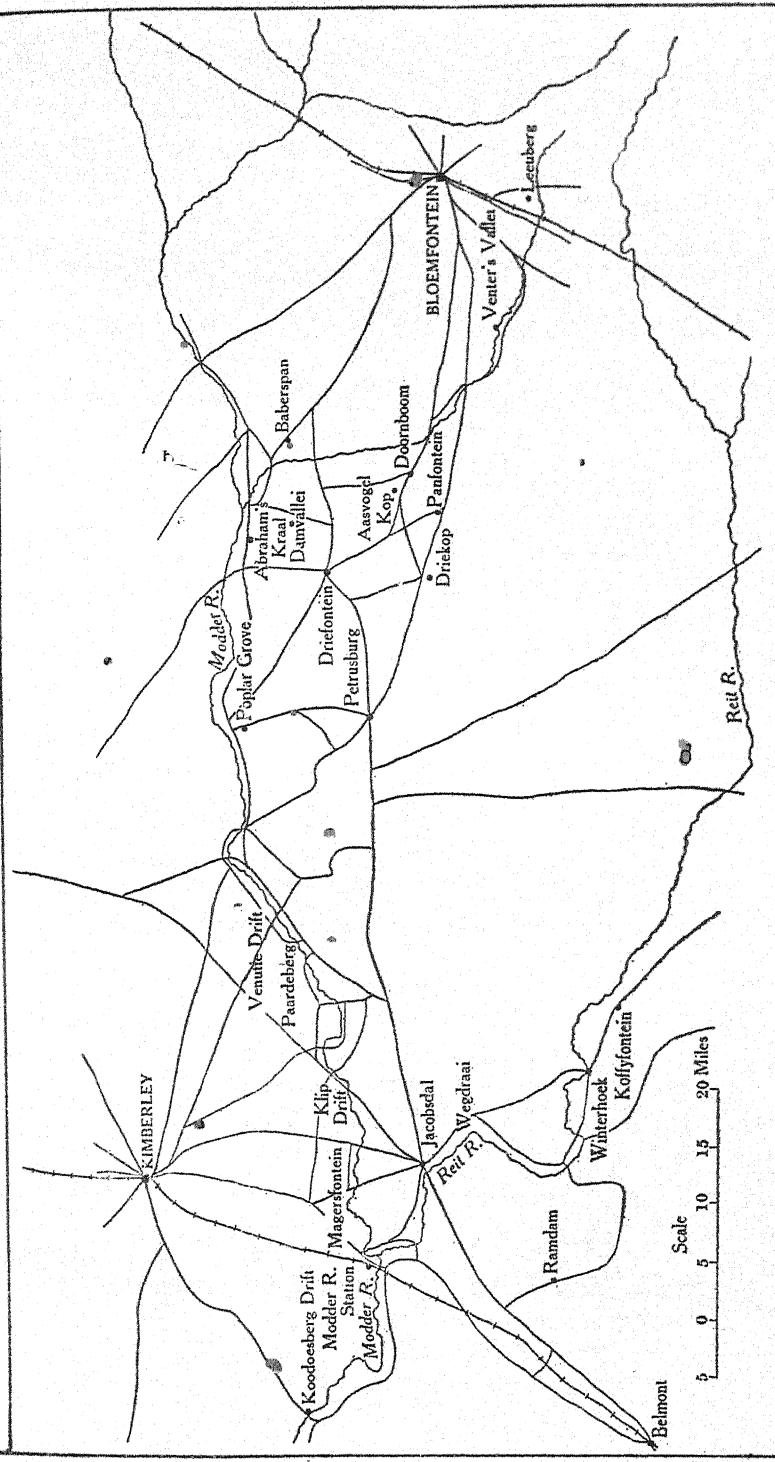
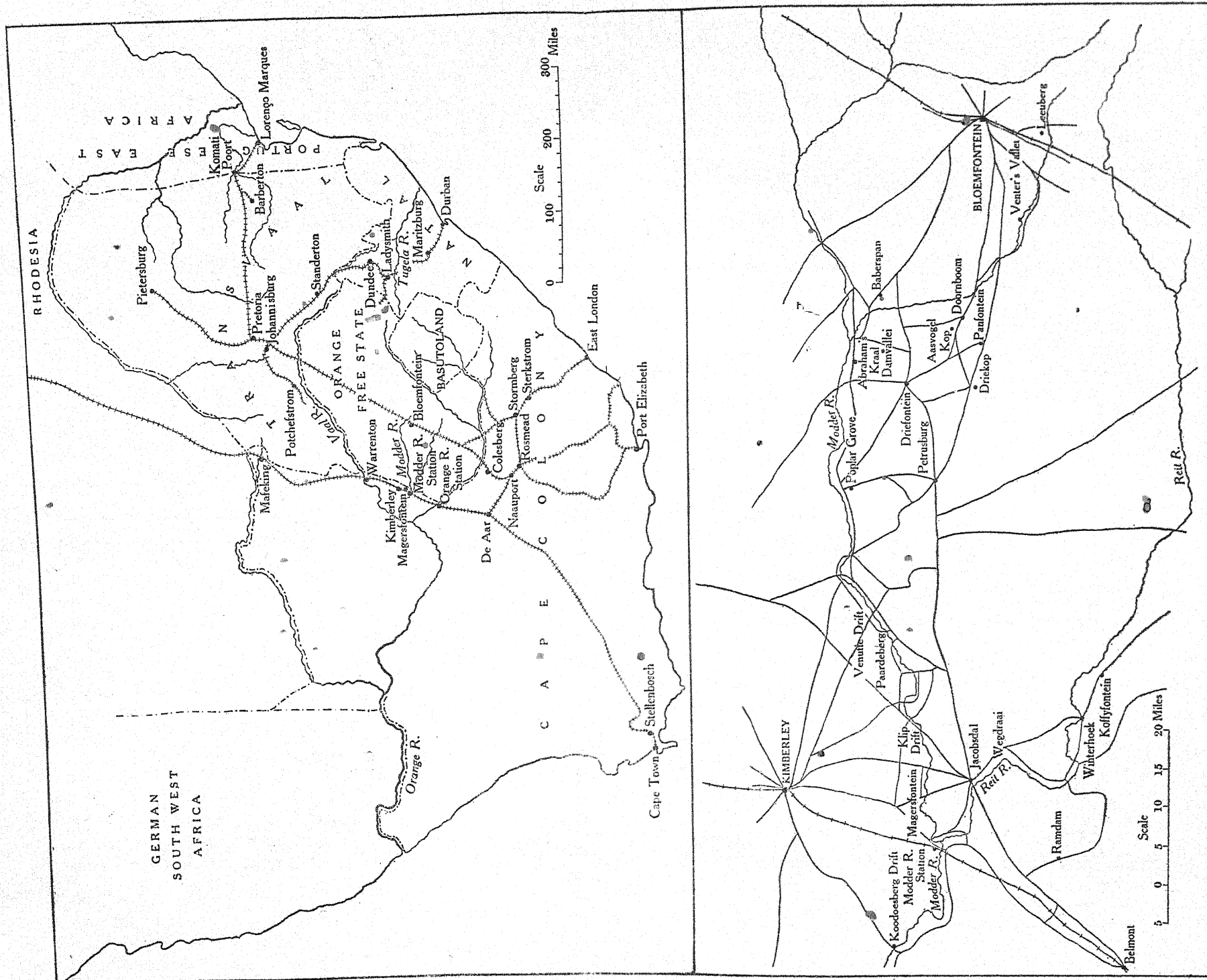
An army disposed in depth can manoeuvre more readily than one moving in line. This, therefore, is a convenient formation when it is desired to strike a heavy blow at a portion of the enemy's forces, and especially when the enemy is superior in numbers and the best chance of victory is to attack him in detail.

It possesses the further advantage that the action of the leading troops of the army may force the enemy to disclose his dispositions and expend his strength, thus affording an opportunity for the remainder to strike an effective blow when the enemy is exhausted. Or, again, the advanced troops may be used to gain time and to secure liberty of action for the rest of the force.

When the enemy's dispositions are not accurately known, formation in depth may also be adopted with the object of insuring united action by a large proportion of the army in any direction.

The drawbacks to formations in depth are that since time is required for deployment into line of battle the army is liable to be beaten in detail, for the leading troops (or, if it is attacked in flank, the centre or rear of the army) may





be overwhelmed before the remainder can come to their assistance. Troops moving in deep formation are also exposed to envelopment before they can deploy; and difficulty may be experienced in sending supplies and munitions to the units in front along roads blocked by the movements of those behind them. Lastly, to manœuvre successfully always demands great skill and judgment.

At the opening of the Jena campaign (p. 159) Napoleon successfully employed a formation in depth. This system was also adopted at the beginning of the Waterloo campaign.

Instances
of forma-
tions in
depth

The army that fought at Ligny and Waterloo amounted, at first, to about 125,000 men; and on the 14th June, 1815, the Imperial Guard, the 6th and 3rd Corps and the reserve cavalry were at Beaumont, the 1st Corps at Solre-sur-Sambre, the 2nd Corps at Ham-sur-Heure, and the 4th Corps at Philippeville. The Prussian army, under Blücher, at that time, extended from near Charleroi to Liège, though one corps was at Ciney; the Anglo-Dutch-Belgians were on the right of the Prussians from Quatre-Bras to Ath. On the 15th the French advanced against the right of the Prussians, the troops marching in the following order: the cavalry of the 1st and 3rd Corps, the 3rd and 6th Corps, and the Guard on Charleroi; the 4th Corps on Châtelet; the reserve cavalry by lateral roads on Charleroi; the 2nd Corps on Marchienne au Pont; the 1st Corps on Thuin and Marchienne. The day's fighting resulted in the Prussian right being driven back to Fleurus. (Map 7 on p. 178.)

• In the same campaign the allied armies were also formed in depth when marching on Paris, after the victory of Waterloo, in pursuit of the French. (Map 11 on p. 230.) On the 25th June, 1815, for instance, their armies stood as follows:—of the Anglo-Dutch-Belgians, total about 80,000 strong, Vivian's cavalry brigade was near St Quentin; the 2nd Division, the Nassau contingent, and the remainder of the British cavalry, were at Joncourt; the 1st and 3rd Divisions, and the Dutch-Belgian infantry, at and near Prémont; the 5th and 6th Divisions, the Brunswick cavalry and infantry, and the reserve artillery at Marez; the 4th Division and Light Cavalry Brigade at Cambray. The Prussians, also about 80,000 strong, were placed:—the 1st Corps at Cerisy; the 4th Corps at Essigny

le Grand; the 3rd Corps at Homblières. The French were at Reims and Soissons. On the 26th Vivian's cavalry brigade was at Mattignies with picquets on the Somme; the 2nd Division, the Nassau contingent, and the remainder of the British cavalry at Beauvais and Lanchy; the 1st and 3rd Divisions, and the Dutch-Belgian infantry at and near Caulincourt; the Guards' Brigade at Péronne; the 5th and 6th Divisions, the Brunswick cavalry and infantry, and the reserve artillery at and near Bellenglise; and the 4th Division and Light Cavalry Brigade at Gouy. Of the Prussians the 1st Corps was at Chauny, with an advanced guard towards Compiègne, the 4th Corps at Ressous, and the 3rd Corps was at Guiscard. On this day some 50,000-60,000 French were at Compiègne and between Reims and Soissons.

The formation of the allies, therefore, was such as to afford an active and enterprising enemy an opportunity of beating them in detail: but since the French were much inferior in numbers, and were also under the influence of a serious disaster, but little actual risk was incurred.

Cromwell's operations against Hamilton in 1648 exemplify the defeat of a force advancing in deep formation by means of an attack in flank (p. 149). In 1814 also, Napoleon first attacked in flank Blücher's army, which was much strung out during its advance on Paris; and after beating portions of this army at Champaubert, Montmirail and Château Thierry, turned and fell on the leading columns of Schwarzenberg's army at Montereau (p. 227).

In 1917 the British unsuccessfully used a deep formation when advancing against the Turkish positions near Ghaza. Towards the end of March the Turks, who could dispose of about 20,000 men, were holding Ghaza with a garrison of about 2000, which was reinforced shortly before the engagement, while the remainder were at Hareira, Tel-el-Sharia, and Huj and to the east of it. The British were standing with two cavalry divisions near Deir-el-Belah, and one infantry division along the Wadi Ghuzzi from the Rafa-Ghaza road to the sea. A second division was at Beni Sela, a third at Khan Yunis and a fourth at Rafa. (Map 6 on p. 144.) On the 27th the mounted troops advanced to the east of Ghaza followed by the division from Beni Sela, while the division from the Wadi Ghuzzi moved on Ghaza. The

remaining divisions were not employed. The attack at first met with some success; but the Turks now began to converge on the troops that were attacking Ghaza, and obliged them to withdraw to avoid envelopment.

FORMATIONS IN ECHELON.

Formation in echelon possesses the advantages and drawbacks both of linear formations and of formations in depth.

When advancing in echelon maintenance is facilitated and also collective rapidity of movement; deployment can be rapid, manœuvre will be less difficult than when in line, and the breadth of the front will hinder envelopment by the enemy. In addition, the leading troops may force the enemy to expose his hand, while a certain liberty of action is retained. Attack in flank can also generally be met by a large portion of the army, and echelon is, therefore, a useful formation when there is a doubt as to the enemy's dispositions.

Movements to a flank in echelon will usually be made when the enemy's forces are lying on a flank of the line of march. The advantages are that maintenance will be easier than when marching in depth, and if, as should be arranged, the leading troops are on the flank that is furthest from the enemy, his envelopment can readily be carried out should an attack be made against any portion of the force except the rear echelon.

The disadvantage of echelons consists in the liability to defeat in detail. This is due to the fact that the force will be deployed on a considerable frontage and also formed in depth; and there will clearly be special danger when moving to a flank with the leading echelon nearest to the enemy. When in echelon the power of manœuvre is also necessarily restricted.

In September 1805, at the time of his advance over the Rhine against the Austrian army under Mack, Napoleon adopted the echelon while as yet uncertain of the whereabouts of the Austrians, who when last heard of were behind the Inn. (Map 5 on p. 140.)

Examples
of forma-
tions in
echelon

According to orders issued on the 17th September, the 5th Corps, to which a cavalry division was attached, was to move from Kehl so as to reach Ulm on the 9th October; the 6th Corps, also with a cavalry division, from Selz, arriving

at Ulm on the 7th October; the 4th Corps, with a cavalry division, from Germersheim was to reach Aalen by the 9th October; the 3rd Corps from Mannheim to Nördlingen by the 10th October; the 1st and 2nd Corps from Würzburg to Weissenburg, arriving on the 9th October; the cavalry reserve and grenadiers of the Guard to Gmünd by the 9th October.

Thus, by the 9th October, the troops would be covered by the Danube from an attack from the south, and would be so placed that at least three corps could easily concentrate to meet the Austrians from whichever direction they advanced; while if the enemy moved against the French centre or right, the left would be in position to envelop them. Should the Austrians stand on the Danube, for instance at Donauwörth, with the idea of striking at the line of communications of the French army when it had marched past them, two or more corps could contain the Austrians, while the remainder turned and enclosed their right, by crossing the Danube at such places as Neuburg and Ingolstadt.

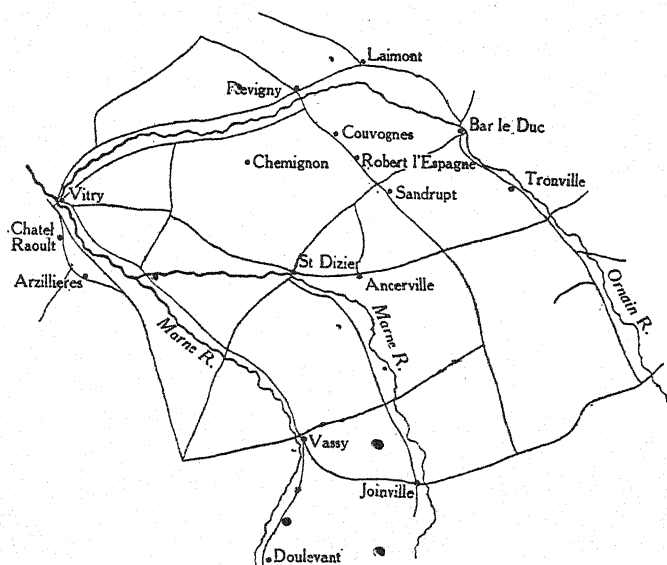
Germans
in 1870

After the defeat of Bazaine's French army and its retirement into Metz in 1870, von Moltke decided to invest this fortress with a portion of the German forces. The German 3rd Army under the Crown-Prince Frederick, and the newly constituted Army of the Meuse under the Crown Prince of Saxony, were to operate against the remaining French troops which had been concentrated under McMahon, and were believed to be at Verdun or Châlons. (Map II on p. 230.) The French were to be attacked in front and on the right flank, when encountered, so as to force them in a northerly direction. In a general way the advance was to be in echelon from the left, the 3rd Army being one march in front of the Meuse Army. Since the position of the enemy was uncertain—the French might, for instance, move southwards to the Aube—the army of the Crown Prince advanced in echelon from the centre. On the 24th August the troops were standing as follows:—the 4th Cavalry Division at Arzillières and Châtel Raoult; the 2nd Cavalry Division at Vassy and Doulevant; the 2nd Bavarian Corps at Bar le Duc-Laimont, the Bavarian cavalry at Revigny; the 5th Corps at Robert l'Espagne-Couvognes; the Würtemberg Division at Sandrucht

and Chemignon; the 11th Corps at Ancerville-St Dizier; the 6th Corps at Joinville; the 1st Bavarian Corps at Tronville. The army, therefore, was so disposed that the enemy would be engaged by one or more corps should he advance either from west, north, or south, although some risk would in each case be run of defeat in detail.

After the victory of the Prussians over the Austrians at Königgrätz, on the 3rd July, 1866, von Moltke also adopted a formation in echelon when marching on Vienna. At this time the bulk of the defeated Austrian army, which had

Prussians
in 1866

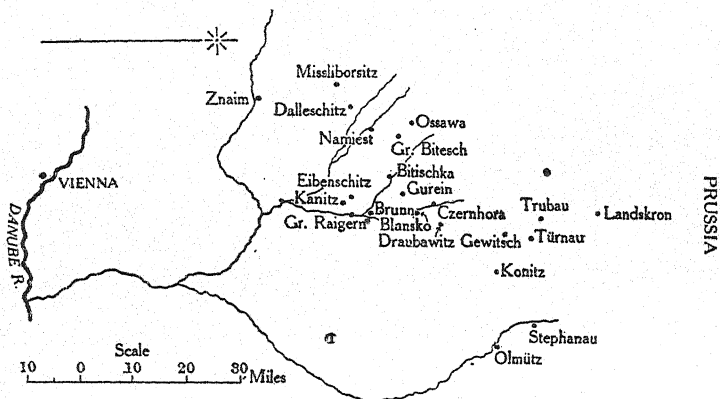


made good its retreat, had rallied under the fortress of Olmütz, and additional troops were being collected near Vienna for the defence of the capital. (Map on p. 134.)

On the 13th July the Prussian armies were standing as follows:—of the 2nd Army, the 1st Corps was at and near Stephanau; the cavalry at Konitz; the 5th Corps at and near Konitz and Gewitsch; the Guards at and near Türrau and Trübau; and the 6th Corps at Landskron. Of the 1st Army the cavalry was at Gross Raigern, Kanitz and Eibenschitz; the 6th Division was at Brünn, the 3rd, 5th and 7th Divisions at Blansko, Gurein, and Gross Bitesch; the 4th Division at Bitischka and Ossawa; and the 8th Division at Draubawitz and Czernhora. The Army of the Elbe had

the advanced guard at Znaim, the 14th Division at and near Missliborsitz, the 15th Division at and near Dalleschitz, and the 16th Division at and near Namiest.

Should the Austrians remain at Olmütz the Prussians, therefore, were so placed that the 2nd Army could both engage their attention and also protect Prussian territory, while the remainder of the force could move rapidly on Vienna. If the Austrians attacked the 2nd Army the 1st could readily envelop their left, and the Army of the Elbe could protect the 1st Army against an attack from the direction of Vienna. On the other hand the Army of the Elbe was somewhat exposed to direct attack from the valley of the Danube.



Austrians
in 1866

This war also furnishes an illustration of the misuse of the formation in echelon. At the commencement of the campaign in Bohemia the Austrians pushed forward a portion of their army to oppose the passage of the Fahlen Gebirge by the Prussian 2nd Army (map on p. 238). The 6th Austrian Corps was, accordingly, directed from the neighbourhood of Opocno towards Nachod, and on the 27th June advanced in echelon, Hertwek's brigade which was in front moving by Neustadt on Wysokow. This was followed by Jonak's brigade which marched by Wrchowin on Kleny, while Rosenweig's and Waldstetten's brigades moved last by Lhota on Skalitz.

Hertwek's brigade soon became engaged with and was driven back by the advanced guard of the Prussian 5th Corps, which was moving westwards through Nachod. Jonak's and

Rosenweig's brigades now came up on the left of Hertwek, but were checked by the main body of the 5th Corps; and finally Waldstetten's brigade attacked towards Wysokow, but was also unsuccessful. The Austrians, who had advanced with their leading echelon nearest the enemy, and were in consequence beaten in detail, then withdrew to Skalitz.

CONCLUSIONS.

Each formation, then, possesses certain advantages and disadvantages, and only the circumstances of the campaign can guide the commander in selecting one or other. At one period a linear formation may be most suitable, at another a grouping in depth, or echelon. Whatever the formation, it should evidently be that best adapted for the attainment of the immediate purpose, due regard being paid to the position and strength both of our own army and of that of the enemy; and also, as is explained in Chapter VI, to the topography of the theatre of war.

STRATEGICAL MOVEMENTS.

The formation of an army should, as has been shown, be such as will enable the commander to make advantageous dispositions for engaging the enemy. Although clearly of great importance this, however, is not the ultimate aim of strategical movements; and, until the enemy's armies have been decisively beaten, all manœuvres should be so designed as to bring about battle in circumstances favourable for success. Further, the circumstances should be such that the victory, if gained, will be so decisive as to prejudice seriously the enemy's power of resistance, if not to involve his complete downfall.

ENVELOPMENT.

Decisive victory without the necessity for pursuit is gained when the enemy's army is completely surrounded and compelled to surrender; and it is this fact that constitutes the principal advantage of operations destined to effect envelopment. The enveloping movement is not without subsidiary advantages. It permits, for instance, of the fullest development of force, as ample space will generally be available for the troops; and, in addition, the objective of the commander

and his daring, will be evident to all ranks, who may therefore be expected to co-operate readily towards its attainment. Further, the army or armies will usually possess several alternative lines of communication, so that in case of failure the forces are not likely to be separated completely from their base or bases, and if one portion is beaten the others will possess their own lines of retreat. The leaders of the enemy's armies may also be exposed to a mental strain of exceptional severity. Unless considerable areas are available for manœuvre, so that they can fall back to avoid the danger of envelopment—and such retirements will as a rule be undesirable both from a political and from a military point of view—or unless the extent of the frontages that are occupied, or the geographical conditions, render complete envelopment practically impossible, the enemy commanders cannot but feel that if their counter-movements miscarry the armies may be forced into a restricted area and eventually surrounded. This may cause hesitation and delay in their operations which may result in disaster.

The principal disadvantage of envelopment lies in the risks that are incurred of defeat in detail, which it will as a rule be the enemy's object to inflict. These risks arise from the fact that an army or armies aiming at the envelopment of the enemy may at first be spread over a considerable frontage, either owing to their geographical situation at the beginning of the operation, or because they have been so deployed as to insure that the enemy's forces may be enclosed as the troops converge on them. It will consequently be difficult so to regulate the movements of the various forces as to prevent the enemy from gaining time to deal with them piecemeal, before they are able to render one another close support. Further, as the wings of the enveloping force converge they will themselves be exposed to attack in flank. In enveloping operations the detachments necessary for the security of the lines of communication of the different converging forces may also be unusually numerous, and this may reduce the numbers available for battle.

The advantages that may be secured by successful envelopment are so important that, when the frontages occupied by the armies render converging movements impracticable, envelopment of the whole or of part of an army may be

attempted by sheer force, the strongest attacks being delivered either on the enemy's flanks, or on widely separated portions of his line, with the object of driving them inwards. Careful timing and simultaneous progress will in this case be equally necessary in order to avoid defeat in detail; otherwise the enemy may be able to concentrate against and overwhelm one of the attacking wings, or may attack in flank or envelop one or both of the wings as they attempt to converge.

Napoleon's operations which resulted in the capture of Ulm, in 1805, afford a good example of a successful movement resulting in strategical envelopment. (Map 2 and Map 5 on p. 140.)

Instances
of en-
velop-
ment

In the spring and early summer of 1805 a coalition was secretly arranged between Great Britain, Austria, Russia, and Sweden, against France. And in August, taking advantage of the concentration of the French armies at Boulogne and in Brittany, where they had been placed with a view of invading England, the Austrians, without waiting for the arrival of the Russian forces which were being moved to their assistance, resolved to send a large army to Italy, then under French occupation, and a considerable body of troops to the Tyrol. At the same time a force of about 80,000 men, under Mack, was pushed across the Inn into Bavaria (apparently with the object of inducing the Bavarians to join the coalition), and the Bavarian army was driven to the north of the Danube.

Abandoning his menaces against England, Napoleon now decided to stand on the defensive in Italy, and to concentrate at the decisive point in the valley of the Danube an army of about 200,000 men, consisting of seven French Corps, a cavalry reserve, and a Bavarian Corps. With these troops he proposed to advance on Vienna, to attack and beat the Austrian forces covering the capital before the Russians could reinforce them, and to interpose between the latter and any Austrian units in Italy and the Tyrol.

The Corps composing Napoleon's army were at first widely scattered, the 1st being in Hanover, the 2nd in Holland, the 3rd, 4th, 5th and 6th near Boulogne, and the 7th in Brittany. The initial concentration, which took place on the Rhine and Main, five Corps being on the Rhine

and two on the Main, therefore occupied some considerable time, and it was the 29th September before the army was ready to advance.

At this juncture Napoleon knew little of the movements of the enemy, except that a force of Austrians had crossed the Inn. His first object, therefore, while further concentrating his army, was to move it to positions favourable for either offensive or defensive operations.

Accordingly, as has been explained (p. 131), the army was ordered to advance by the 9th October to the line Ulm-Aalen-Nördlingen and Weissenburg.

On learning, soon after these instructions had been issued, that an Austrian force, said to be about 100,000 strong, was advancing on Ulm, and had seized Memmingen on the Iller and the exits from the Black Forest, Napoleon modified his original orders so as to withdraw his right from the danger of isolated collision with the enemy. The 5th Corps, with the reserve cavalry, was consequently directed to Göppingen, the 6th Corps to Gingen, the 4th to Aalen, the 3rd to Nördlingen, and the 1st and 2nd to Weissenburg. Subsequently the 6th Corps was ordered to reach Heidenheim on the 7th October. The rest of the army was to gain the following localities on the 8th:—the 5th Corps Neresheim, the 4th and the reserve cavalry Donauwörth, the 3rd Neuburg, the 1st Ingolstadt and the 2nd Nassenfels; and the Bavarians were to march with the left.

While these movements were taking place Napoleon joined his right, which was thought to be in greatest danger of being attacked. Judging, however, from the movements of the Austrians, who were reported to be marching hither and thither without settled plans, that they were confused and demoralized, he decided, on the 3rd October, to endeavour to capture their whole army.

Meanwhile Mack, who had calculated that the French could not cross the Rhine in force before the first week in November, had advanced to the Iller, leaving a detachment of 6000 men, under Kienmayer, at Neustadt, to watch the Bavarian forces. It was apparently proposed to await, on the Iller, the arrival of the Russians, attacking any French troops that might advance from the Rhine before they were clear of the Black Forest.

Early in October the Austrians under Mack were standing as under:—in the Vorarlberg, was Jellachic with 14,000 men; Reisch with 19,000 and Schwarzenberg with 12,000 were along the Iller and Danube from Kempten to Günsburg; Kienmayer was near Neuburg; and about 15,000 men were coming up from the Tyrol.

Hearing, on the 5th, of the arrival at Geislingen of a French force (the 6th Corps and reserve cavalry) which was believed to form the left wing of the French army, Mack ordered Reisch and Schwarzenberg to Ulm, and Jellachic to Biberach. Next day the enemy was reported to be coming from the north and the main body was therefore moved to the line Günsburg-Ulm; and, on the 7th, 5000 men were detached to Wertingen to attack a French force which had crossed the Danube at Donauwörth. This detachment was defeated by a French column under Murat, consisting of the reserve cavalry and a division of the 5th Corps, the whole of the Austrians being either disabled or captured.

Meanwhile, the French army had reached and begun to cross the Danube, sufficiently far to the east of Mack's force to render his interception probable should he attempt to escape towards Vienna. On the 8th the 6th Corps was at Langenau and Gundelfingen, the 5th at Wertingen, the 4th at Augsburg, the 3rd at Aichach, the 2nd at Neuburg, the 1st Corps, with which were the Bavarians, at Ingolstadt, and the Guard at Donauwörth.

On the 10th Napoleon seems to have believed that Mack would endeavour to fall back on the Tyrol via Memmingen. At the same time the retirement of Kienmayer, who had moved eastwards from Neuburg across the Isar, led him to suppose that the Russians might have reached this river. The following orders were therefore issued:—the 5th Corps, the reserve cavalry, and the 6th Corps, were placed under the orders of Murat, the last moving to Günsburg, the first two to Burgau; the 4th Corps was to proceed to Landsberg, the 2nd Corps and the Guard to Augsburg, the 1st Corps, with the Bavarians, to Pfaffenhofen and Munich, the 3rd Corps to Dachau.

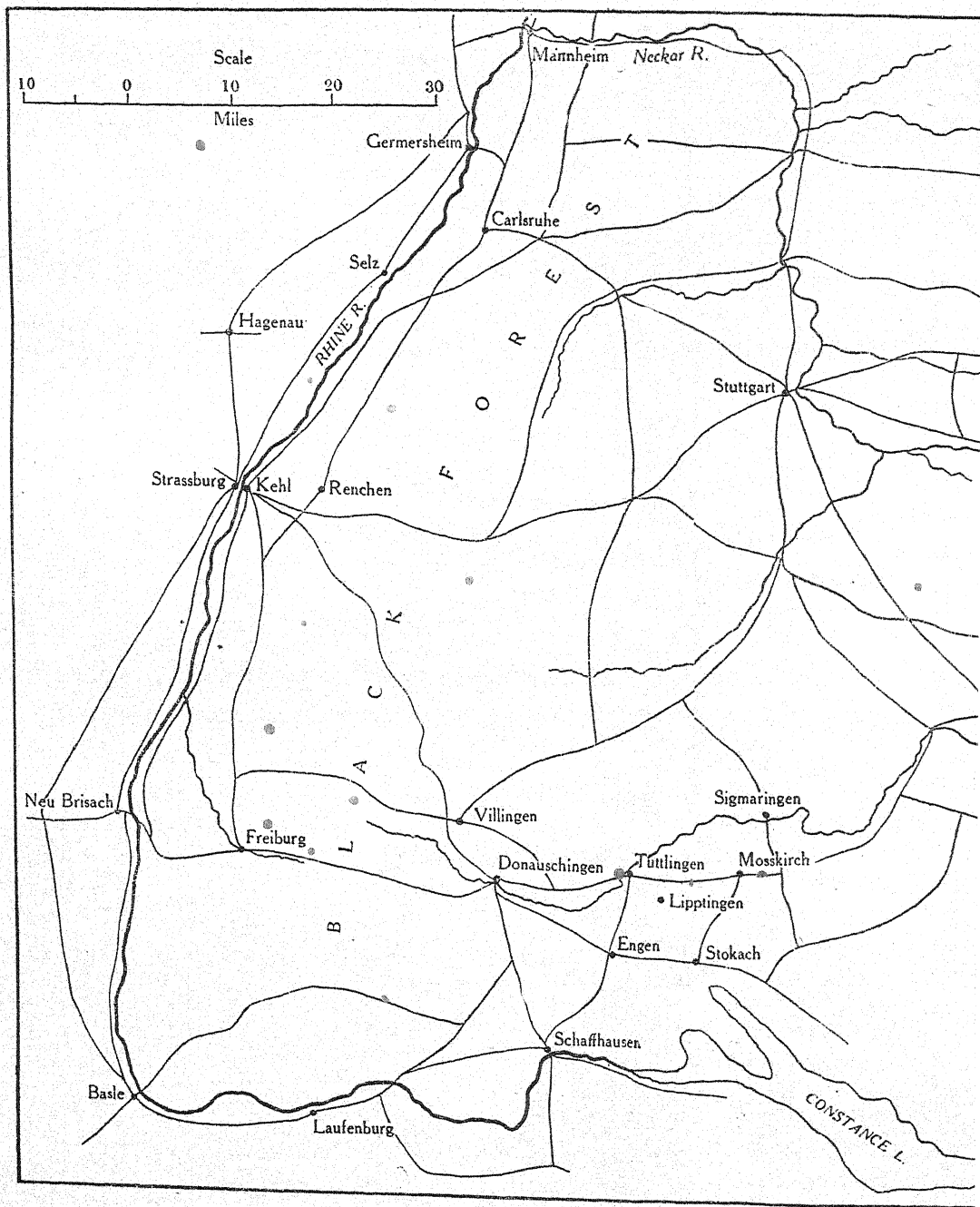
The army was, in consequence, so disposed that, while sufficient forces were available to contain the Russians and the troops under Mack, should either take the offensive, two

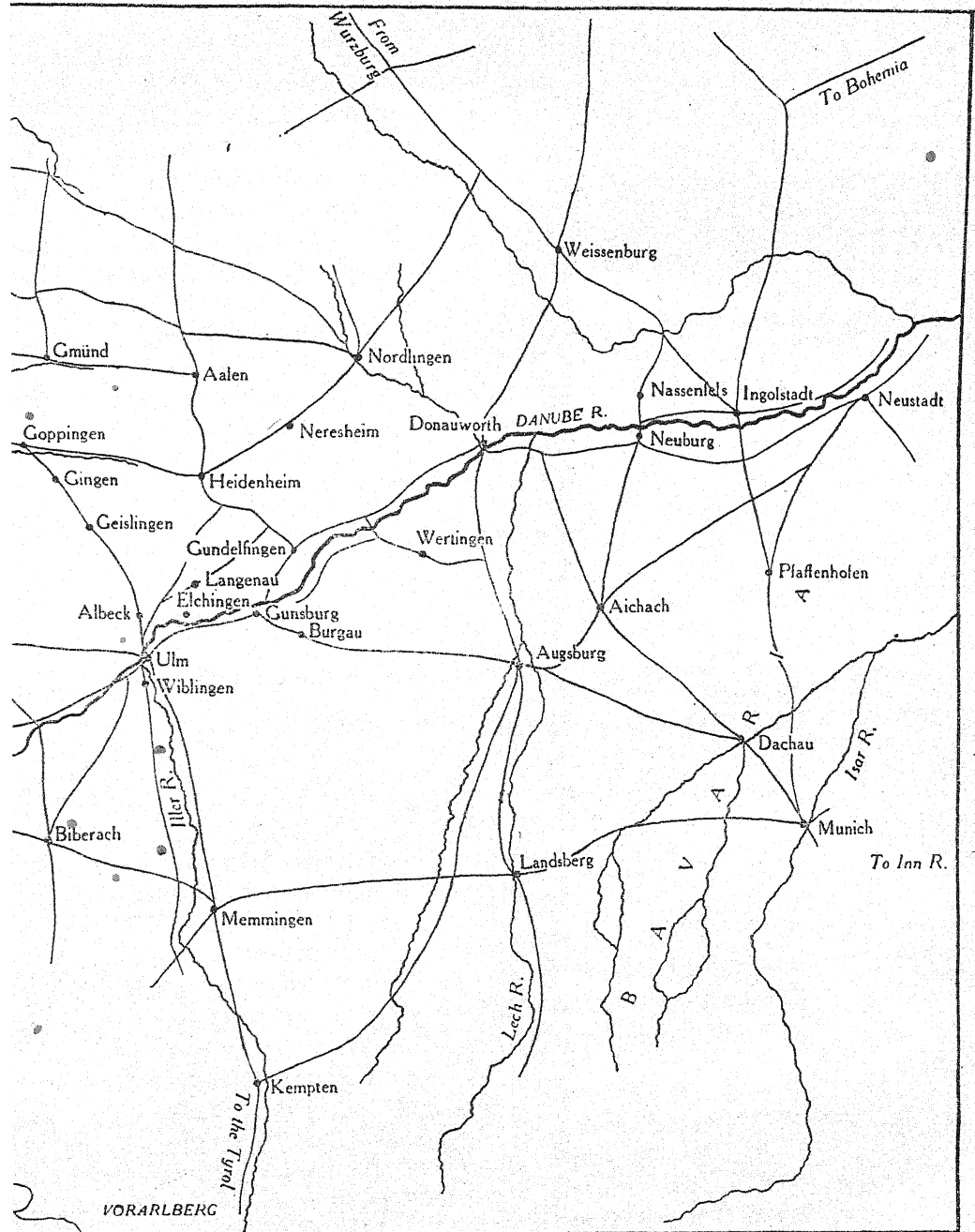
corps and the Guard could march wherever their services were required; and the 4th Corps would be well placed to intercept Mack's retirement to the Tyrol should this be attempted. On the other hand, no troops would be north of the Danube should Mack break away in this direction, relying for subsistence on the supplies that had been collected by Napoleon for the French army.

The result of the disaster to the detachment sent to Wertingen seems to have convinced Mack that his army was in serious danger; and now he resolved to attempt to gain Bohemia by the roads leading north of the Danube. For this purpose his force was concentrated at Ulm. On the 11th the Austrian advanced guard, when marching to Langenau, met with a division of the 6th Corps which had not yet crossed the Danube; and though the French were defeated Mack's movement was for the moment checked.

It was, however, decided again to attempt to break away in a north-easterly direction; and, on the 13th, a force of 13,000 men under General Werneck marched on Heidenheim, covered by a flank guard of 18,000 men placed under Reisch at Elchingen. At the same time 18,000 men under Schwarzenberg demonstrated on the Iller with the object of distracting the attention of the French, and Jellachic with 5000 men retired up the Iller to the Tyrol.

Napoleon now ascertained that no immediate danger was to be feared from the Russians, who though hurrying to the Inn were not yet present in force. Leaving, therefore, the 1st and 3rd Corps and the Bavarians on the Inn, he continued his enveloping movement against Mack, Soult with the 4th Corps being ordered to reach Memmingen by the 13th October, and Murat was to contain the Austrians by demonstrations along the lower course of the Iller. Learning that Mack had concentrated a large number of troops at Ulm, and of the encounter at Langenau, Napoleon, on the 13th, directed the bulk of the 6th Corps to cross to the north bank of the Danube at Elchingen, the division which was still north of the river occupying Albeck. The 5th and 4th Corps were to advance on Ulm, and the 2nd to Wiblingen, the Guard apparently remaining under his own orders. The result of these movements was that the whole of the 6th Corps reached Albeck, driving the Austrians under





Reisch to Ulm. On the 15th the 5th and 6th Corps and the Guard were north of the Danube, the 2nd Corps and the reserve cavalry south of Ulm, while Soult had captured Memmingen and 4000 prisoners. With the exception of Werneck's detachment, which was engaging a division of the 6th Corps near Albeck, almost the whole of Mack's army had therefore been surrounded in Ulm.

On the 19th Mack capitulated with 30,000 men, while Werneck had surrendered the day before to a detachment under Murat.

The plan adopted by the Germans in 1914 appears to have provided for the envelopment of the French Armies, which were also to be cut off from any British troops that might have been landed at Havre and the ports to the east of it. (Map 2 and Map 12 on p. 252.) Pivoting on the 4th Army of ten divisions, which was to advance through the Ardennes and could probably hold its own if attacked in this difficult, wooded and rugged area, the 3rd, 2nd and 1st Armies, comprising thirty-four divisions, besides cavalry, were to march through Belgium, outflank the French left and drive it southwards. At the same time the 5th and 6th Armies, of some nineteen divisions with a proportion of cavalry, were to push through Luxemburg and issue from Lorraine engaging the French and holding them until the German right could intervene with effect. A 7th Army of seven divisions and certain other formations was to secure Alsace operating in the rough highlands of the Vosges.

Successful envelopment involves exact timing and close co-operation, and it is yet to be shown that these can be achieved when very large armies undertake this manoeuvre; and that the difficulty of co-ordinating the operations of such masses is not insuperable. In 1914 the Germans had further to overcome the resistance or to neutralize the groups of fortresses, such as Nancy and Verdun, which helped to bar the roads westwards from Lorraine.

In the event, as has been pointed out (p. 128), the Germans were defeated owing to the fact that their right was successfully attacked in flank; and as the centre also met with a reverse the whole army withdrew behind the Aisne.

The general policy of strategical envelopment was also adopted by the Western group of Powers, and by Russia, up to

Germans
in 1914

the time of her defection in 1917. In this case it was perhaps adopted partly for geographical reasons (see Chapter VI), and in part because the fullest development of force as well as closest co-operation between their armies could be attained by a converging advance into the enemy's territory. Further, simultaneous and co-ordinated action was necessary to prevent the Germanic Powers from striking heavy blows alternately at one or other of the allied armies. (Map 2.)

Allies
in 1917

The plan of campaign chosen for the British, French, Italian and Russian forces against the Germans and Austrians, in 1917, consequently "comprised a series of offensives on all fronts, so timed as to assist each other by depriving the enemy of the power of weakening any one of his fronts in order to reinforce another." Unfortunately, "the great general and simultaneous offensive then agreed on did not materialise. Russia...not only failed to give the help expected, but even failed to prevent the enemy from transferring forty fresh divisions from her front in exchange for tired ones used up on the Western front... The combined French and British offensive in the spring was launched before the Italians could be ready..." In fact, the inherent difficulty of co-ordinating and timing these convergent operations on a continental scale again proved insuperable, and the Germanic Powers were able to deal with the allies piecemeal, inflicting severe defeats on the Russians and Italians.

Palestine
1918

The allies, however, successfully pursued the policy of envelopment on a smaller scale against the Turks in 1918. After their defeat at Ghaza, in 1917, the Turks retreated to a series of positions to the north of Jerusalem, and in September, 1918, were holding a line from the Hedjaz railway by Es Salt and Furkah to the sea. The 4th Army (of about 8000 fighting men) was east of the Jordan, the 7th (some 7000 fighting men) stood astride the Jerusalem—Nablus road, and the 8th (10,000 fighting men) held the frontage from Furkah to the coast. (Map 6 on p. 144.) There was a reserve of 3000 fighting men in Galilee; the railway communications to the north were guarded; and Maan, and the Hedjaz route to the south of it, were held by the 2nd Army of some 6000 fighting men. The Allied force under General Allenby was mainly west of the Jordan, and consisted of four cavalry and

mounted divisions of British troops, seven British infantry divisions and a detachment of French and other troops, the total fighting force amounting to about 12,000 sabres and 57,000 others. In addition, Arab forces were operating in the Hedjaz and against the Hedjaz railway.

The enemy's forces were split up by the deep valley of the Jordan, and the communications of the troops standing west of the river ran first to El Afule, and then by Beisan north-eastwards. General Allenby resolved to take advantage of this situation, and concentrating on his left to break through the Turkish lines near the coast, gain El Afule and Beisan, and at the same time seize the passages over the lower Jordan, thus enveloping the 7th and 8th Armies. Forty-five thousand troops, including 8000 sabres, were, therefore, detailed for the main attack on the enemy's right.

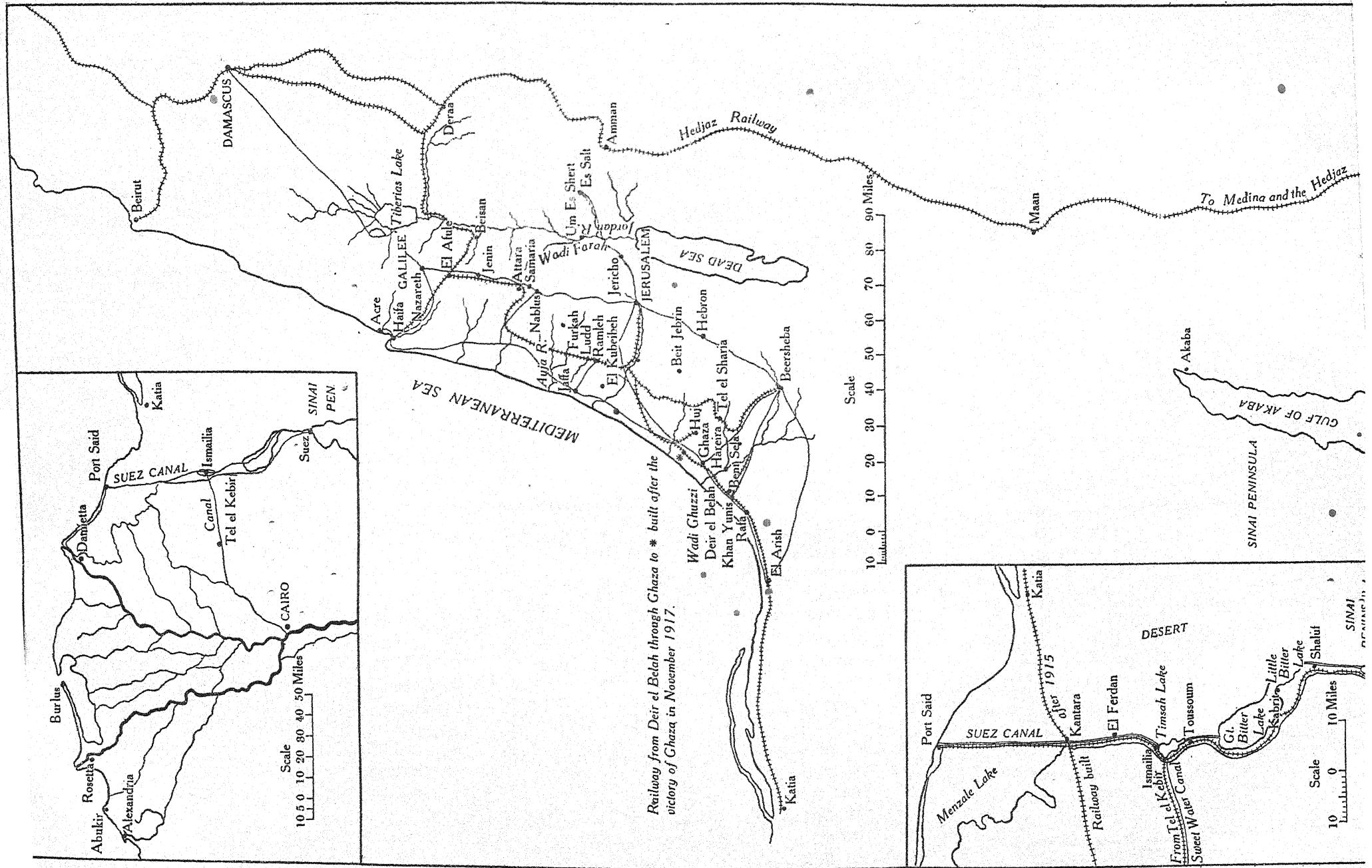
In order to divert the enemy's attention and conceal the concentration of force in the coastal area, demonstrations were made as if for an advance to the east of the Jordan. Arab forces and aircraft also attacked Deraa on the 17th and 18th September, and measures were taken to prevent enemy aircraft from crossing the British lines. Further, as the additional troops reached the British left, they were concealed in the groves and gardens round Ramleh, Ludd and Jaffa.

The attack, which was delivered on the 19th September, came as a surprise to the Turks; and by the evening of the 20th the greater part of the 8th Army had been overwhelmed, the 7th was in full retreat, and the British cavalry had gained Jenin and were advancing on El Afule and Nazareth, and aircraft were attacking the enemy's columns. Next day the infantry of the British left reached Attara, Samaria and Nablus, and the right took Um Es Shert and the mouth of the Wadi Farah. By the 24th the remainder of the Turkish troops still to the west of the Jordan had been surrounded, and the 4th Army was retiring on Amman. Next day the British right occupied Amman and cut off the retreat of the 2nd Army from the Hedjaz, and the cavalry of the left marched on Damascus to intercept the 4th Army, the direct pursuit of which was confided mainly to the Arab forces. In the end only about 4000 Turkish fighting troops of the 4th, 7th and 8th Armies succeeded in effecting their escape.

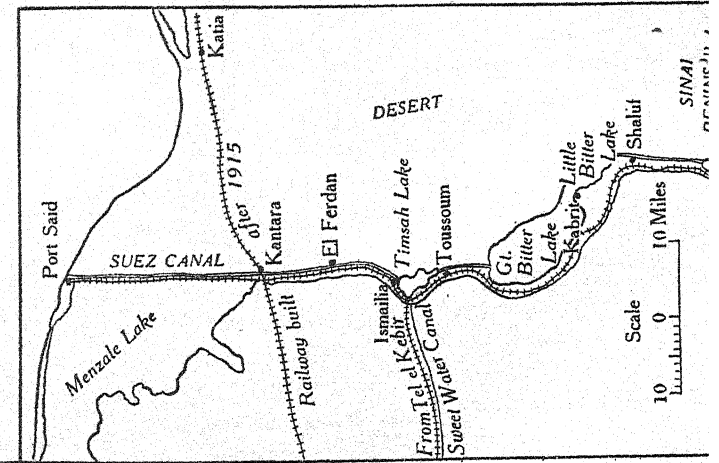
INTERIOR LINES.

Much of what has been stated in regard to the difficulties of the converging attack may be urged in favour of what are known as *interior lines*. The interior position may be said to be held by the army, or group of armies, which has its forces nearer to one another in point of *time*. The commander, therefore, can either unite the whole more rapidly than the enemy; or can concentrate against some portion of the enemy's front more quickly than forces can be assembled adequate to meet the blow; or again can promptly mass troops against an attack. The possession of interior lines is, in fact, often relative to facilities for moving troops and not to distance. In 1914-15, for instance, the Russian forces in Poland were standing on the inner curve with reference to the Germans, yet the German army possessed interior lines, owing to the superiority of the railway system in Silesia, Posen and West and East Prussia. (Map 2.)

The advantage resulting from these superior facilities for the concentration of force becomes clearly of greater consequence in proportion as the frontage of operations increases. A difference of six hours, for example, in the relative rapidity of concentration is but a small matter compared to one of two or three days, or in the case of large forces perhaps of weeks. Another advantage is that the same units can be used in several localities, which is almost equivalent to an increase in the numerical aggregate of the force. On the other hand to effect this transference will certainly tax the transportation service of the nation, by locking up railway rolling stock, or shipping, and possibly mechanical transport in addition. The powers, endurance and mobility of the troops will also be subjected to a severe strain, for they must often march, since it is unlikely that they will always be able to move by rail, ship or motor, from side to side of the zone of operations, while their attacks may be frontal rather than enveloping or outflanking. Victory, moreover, may depend largely on the power of the commander so to manoeuvre as to leave the enemy in doubt as to his intentions; and for this accurate information as to the enemy's dispositions is required, and then rapid and timely action. Such successes too as may be achieved will have been gained over



Railway from Deir el Belah through Ghaza to * built after the victory of Ghaza in November 1917.



portions of the hostile forces only, and further operations will be necessary against the remainder. No advantage will be obtained from interior lines unless the necessary space is available for manœuvre, without which an army, as is shown by the experiences of the Austrians in the Ulm campaign, will be in danger of being surrounded.

The Germans exploited their interior position to the fullest extent in the war of 1914-18. (Map 2.) In the summer of 1915, for instance, about eight divisions belonging to the Prussian Guard Reserve Corps, the 18th and 41st Corps, which had been especially trained in the work of assault, were rapidly moved from the French to the Eastern front to augment the forces with which the Germans attacked and defeated the Russians. Later in the year ten German divisions were transferred from the Russian front to take part in the conquest of Serbia. During 1917, as has already been pointed out, troops to the equivalent of forty divisions, tired out by fighting in France and Belgium, were relieved by fresh units brought over from the Russian theatre; and it was by this expedient that the Germans were enabled to hold out against the continued attacks of the British. In the autumn of this year eight or ten divisions were also moved from the French and Russian fronts to take part in the offensive against the Italians, who, in consequence, suffered a severe reverse at the hands of the Central Powers. Further, in the three and a half months from November, 1917, to March, 1918, no fewer than twenty-eight divisions were transferred by the Germans from Russia and Rumania to the Western front, and six divisions also were sent back from the Italian front. At the commencement of the German offensive in March, 1918, therefore, the number of German divisions in France and Belgium was greater by forty-six than had been the case in the previous November.

The operations which culminated in the victory of the French over the Austrians at Castiglione supply an example of the use of interior lines on a small scale. After his successful campaign in the Alps, in the spring of 1796, Napoleon laid siege to Mantua, disposing his available forces (some 30,000 men, including 5000 in hospital) so as both to close the principal roads available for a relieving army, and to cover his

Interior
lines ex-
emplified

Castig-
lione 1796

lines of communication to Milan, from which supplies and stores, etc., were drawn. At Legnago there were 8000 men under Augereau; at Verona 5000 under Despinois; Masséna had 8000 at Rivoli and La Corona; Sauret with 5000 was at Salo; besieging Mantua were 7000 under Sérurier; and in reserve, at Villafranca, Castelnuovo and Castiglione, there were 6000. (Map 9 on p. 224.)

Towards the end of July Napoleon was aware that Austrian forces estimated at 67,000 men—in reality their strength was 50,000—were advancing to the relief of Mantua along both sides of Lake Garda. On the 29th their main body, under Würmser, came in contact with the French, when Masséna was driven out of La Corona, and Verona was attacked. At the same time another group of some 18,000–20,000 under Quosdanovitch attacked Salo, and after forcing Sauret back to Descenzano, advanced to Brescia and San Marco, that is, against the most direct route to Milan. Alarmed by the prospect of losing connection with his base at Milan Napoleon adopted an expedient to which he rarely found it necessary to have recourse, and a council of war was called, at which all the officers with the exception of Augereau advocated withdrawal behind the Po.

Dismissing the council, Napoleon resolved to raise the siege of Mantua, to send the baggage to Milan, and to concentrate against the enemy's divided forces. As he subsequently wrote to the French Government—"If not strong enough to make head against the two groups of the enemy's forces, my army could at least beat each of them separately." Orders were therefore sent to Masséna and Despinois to fall back on Castelnuovo, where 2000 reserve cavalry were standing, and to Augereau to move to Roverbella and Villafranca.

On the 30th the Austrians continued to gain ground. Napoleon now apparently resolved to concentrate against Quosdanovitch, and in doing so to clear his own communications with Milan. Masséna was therefore directed to occupy Peschiera and to secure the bridge at Vallegio, that is to move where he could delay the advance of the column of Austrians under Würmser. At the same time Augereau, the reserve cavalry, and part of Sérurier's force from Mantua were sent towards Montebelluna, the remainder of Sérurier's troops were ordered to raise the siege of Mantua and to fall

back to Marcaria; and Sauret, reinforced by Despinois, received orders to attack Quosdanovitch.

The 31st saw Quosdanovitch withdraw to Gavardo under the pressure from Sauret, Despinois, and part of Masséna's force, while early on the 1st August Augereau, having left a detachment at Castiglione, reoccupied Montechiaro and Brescia, thus again reopening direct communication with Milan.

The siege of Mantua was raised during the night of the 31st-1st, the siege equipment being disabled and abandoned, and the main Austrian force under Würmser occupied Vallegio. Hearing that the French were in full retreat, Würmser, on the 1st August, assembled the main body of his troops at Roverbella with the object of pursuing the enemy, at the same time occupying Borghetto and Goito, and sending part of his force to Mantua. Meanwhile, Napoleon himself reached Brescia late on the 1st, when he ordered Guieux, now commanding Sauret's force, and Despinois to follow Quosdanovitch, Masséna to hold San Marco, so as to prevent the remainder of the Austrians from getting touch with Würmser in this direction, and Augereau to Montechiaro with the object of containing Würmser.

No decisive events occurred on the 2nd, the French being apparently too much exhausted to undertake any great effort; but Würmser's advanced guard gained Castiglione and his main body assembled at Goito.

On the 3rd, communication having been established between the two Austrian forces both resumed their advance. At the same time Napoleon took the offensive, Guieux, Despinois, and a portion of the French reserve being moved on Gavardo, while Augereau marched on Castiglione, and Masséna was at first retained at San Marco in a central position. During the day a portion of the group under Quosdanovitch was captured, which caused him to retire northwards; meanwhile Masséna at Lonato, and Augereau at Castiglione, were engaged with columns of Austrians. The next day Napoleon ordered Guieux and Despinois to follow Quosdanovitch (a movement calculated to leave the enemy in doubt as to the direction in which the decisive blow was to be struck) and concentrated the remainder against Würmser. This general was also taking steps to collect his force at Castiglione,

though about 5000 men were detached, probably with the object of getting touch with Quosdanovitch, to attack Peschiera, which was still held by a French garrison.

On the 5th August, Napoleon with about 23,000 men attacked and beat 25,000 Austrians at Castiglione; who, however, retired without much difficulty across the Mincio, the French being too much exhausted for close pursuit.

Wellington's campaign in Portugal in 1809 also illustrates the advantages of interior lines, and at the same time shows how necessary is prompt action for the attainment of success (p. 180).

OPERATIONS TO PLACE AN ARMY ASTRIDE THE ENEMY'S COMMUNICATIONS.

The welfare and existence of an army are, as has been pointed out, intimately connected with the maintenance of free communication with its immediate bases, for from these must come its reinforcements, stores and supplies. The security of the lines of communication is, therefore, clearly of the first importance.

Generally speaking, the communications of an army are most secure when they run back at right angles to its front, and when the centre of the army is on the principal lines of communication; for the enemy will then find the greatest difficulty in reaching the communications without exposing his own. If the communications lead diagonally away from the front of the army, or if the principal lines lie behind a flank, the situation obviously is disadvantageous, since the enemy may be afforded an opportunity of attacking the communications without reciprocal risk to his own.

The position of an army that has been separated from its immediate base, and, as it is termed, has lost its communications, is little less than desperate, for although they may be regained by victory, and in certain cases by a rapid march, defeat in battle must involve irreparable disaster. So serious is the situation of a force whose lines of communication are even in danger that the troops are likely to be dismayed and demoralized, while the leader can hardly fail to be confused and disconcerted. The army, in consequence, will be in the worst condition to meet and overcome difficulties: defeat will be probable, and a reverse calamitous.

It is therefore often the object of a commander so to direct and move his forces as to interpose between the enemy and his immediate bases, and sever his communications with them.

This advantage was clearly recognized by Napoleon, one of whose favourite devices, when the direction of roads permitted, was to manœuvre so as to menace or intercept the enemy's communications. In these circumstances he calculated that the hostile army would either be ruined, or brought to battle when retreating and in disorder.

The principal disadvantage of a movement with the object of interrupting the enemy's communications is that an army cannot, as a rule, do so without exposing itself to attack while advancing against them; an opportunity of which it is to be expected that the enemy will attempt to avail himself. Should he fail to do so the attacking army will still be unable to sever the enemy's communications without placing itself in such a position that, if defeated in the battle (which usually must be fought and won before the maximum benefits of the manœuvre can be gained), its own communications will be endangered if not absolutely lost.

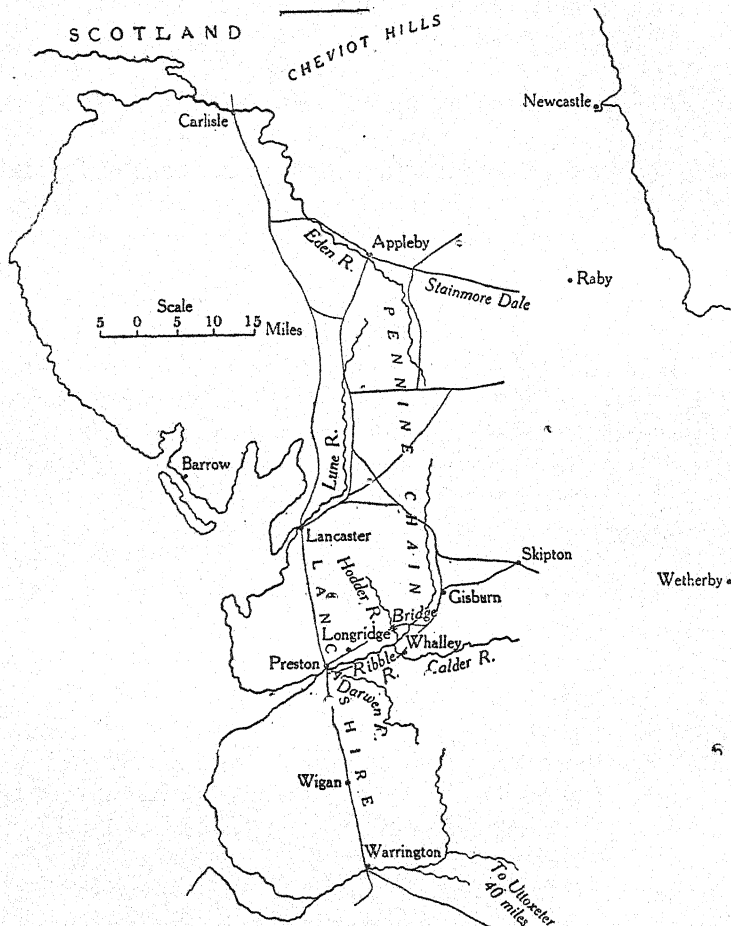
The operations culminating in the battle of Preston furnish an example of a successful movement against the enemy's communications.

During the Civil War in Great Britain a Scottish force of about 3500 horse and 7000 foot, under the Duke of Hamilton, invaded England in July 1648, and marching through Carlisle was joined by some 4000 Royalists under Langdale. Owing to insurrections in Kent and South Wales only 2000 men, commanded by Lambert, in addition to those in garrison at Newcastle, Raby and other places, were at first available to oppose the invaders; but by occupying Appleby (from which the communications of the Scots could be menaced should they advance into Lancashire), and also the western exits from Stainmore Dale, Lambert gained time for the collection of troops, obliging Hamilton to besiege and capture Appleby.

On the 29th July Appleby Castle was taken; and Hamilton, who had now been reinforced by 7000 men from Scotland, and was expecting assistance from Ireland, marched south-

Examples
of operations
to sever the
enemy's com-
munications

wards into Lancashire in three columns. On the left was Langdale, who acted as flank guard against the forces of Lambert (which followed the invaders, moving along the area east of the Pennine Chain); in front moved the main body of the Scots; and about a day's march behind was a force of 1200



horse and 1500 foot, brought from Ireland to Barrow under Monro.

Meanwhile Cromwell, having crushed the insurrection against the Parliament which had broken out in South Wales, had hurried northwards with such speed that more than 250 miles over bad roads were covered in twenty-six days. Further, instead of adopting the commonplace policy of

marching directly against the enemy, Cromwell brought his forces up under cover of the Pennine Chain to a locality from which the enemy's flank could effectively be menaced, a junction being made with Lambert's troops on the 12th August at Wetherby.

The army at Cromwell's disposal now amounted to some 3000 horse and 5600 foot; and with these he advanced on the 14th August to Skipton, where two main routes over the Pennine Chain into Lancashire bifurcate, the northern leading on Lancaster by the valley of the Lune, the southern on Preston by that of the Ribble or the Calder. Here Cromwell probably learnt that the enemy was advancing through Lancashire; and abandoning his baggage train in order to facilitate rapidity of movement he marched on Preston, reaching Gisburn on the 15th, and Hodder Bridge the next day.

Intelligence was now received that Hamilton's army consisted of at least 12,000 Scottish foot and 5000 Scottish horse, that with Langdale were 2500 English foot and 1500 horse, and that Monro's force of 1200 foot and 1500 horse was marching to join Hamilton. The enemy was believed to be drawing towards Preston from all his out quarters, and the question to be decided was whether to anticipate him by advancing via Whalley, south of the Ribble, or to march over Hodder Bridge and move north of the river, engaging the enemy wherever met; for it was thought that the Scots would probably stand and fight with the object of insuring their junction with Monro.

It was decided that to engage the enemy was the first business, and the advance was continued along the north bank of the Ribble, a party being left, however, to guard the bridge at Whalley.

Early on the 17th Cromwell attacked Langdale's advanced troops at Longridge, and forced them to fall back to Preston. Hamilton seems to have believed that only Lambert's detachment was attacking Langdale, whose force had now become rear guard to the main body of the Scots. He therefore sent the bulk of the infantry towards Wigan, which had already been occupied by the Scottish cavalry, leaving a detachment of Scots to assist Langdale.

As a result this commander after a stout resistance was

defeated with the loss of 1000 killed and 4000 prisoners; while Cromwell had, by nightfall, captured the bridges over the Ribble and Darwen at Preston, thus not only separating Hamilton from Monro, but interposing between the former and his base Scotland.

Detaching a body of horse to watch Monro, and strengthening the force at Whalley Bridge, Cromwell marched with 3000 foot and 2500 horse against Hamilton's Scots, and coming up with them at Warrington forced the remainder of the infantry, 7000 strong, to lay down their arms. Hamilton, who with 3000 horse attempted to regain Scotland, was closely followed and obliged to surrender on the 25th August at Uttoxeter.

Paarde-
berg in
1900

The operations resulting in the victory of Paardeberg were similar in character.

The reverses experienced by the British at the commencement of the South African war in 1899 caused large reinforcements to be sent out to South Africa, under Lord Roberts, who was nominated commander-in-chief.

On arrival at Cape Town in January, 1900, Lord Roberts found that the British and Boër armies in Cape Colony were disposed as follows:—at Sterkstroom a British force of some 5500 fighting men was faced by 4000 Boers; near Colesberg about 3000 British opposed 5000 Boers; at Modder River Station 9000 British were being held in check by 8000 Boers entrenched under Cronje at Magersfontein, whose principal line of communication led along the Modder to Bloemfontein; and 3000 Boers under Ferreira were investing a small British force in Kimberley. (Map 4 on p. 128.)

In the plan of campaign originally contemplated by the British it had been proposed that the main army should advance direct on Bloemfontein by the shortest route via Naaupoort. This plan had been published in the London papers, and was therefore probably known to the Boers, who moreover were believed to be under the impression that lack of transport would oblige the British to march along one of the railway lines leading northwards from Cape Colony.

Roberts took advantage of these circumstances to conceal his real projects. These were to intercept Cronje's communications with Bloemfontein by seizing the fords by which

the road crossed and recrossed the Modder; at the same time the British cavalry was to push on to Kimberley so as to interpose between Ferreira and Cronje, and also to prevent the retreat of the latter in a northerly direction.

In order to mislead the Boers some activity was displayed by the British at Sterkstroom, while of the reinforcements one division was sent to Naaupoort, and the remainder were collected near Modder River Station. At the same time false orders were circulated for the concentration of the British forces in the area south of Colesberg. These artifices produced the desired effect, since the Boers made no changes in their dispositions except for the despatch of a reinforcement of 2000 men to Colesberg, their forces remaining scattered, weak in every locality, and liable to defeat in detail.

At the beginning of February, Roberts began to put his plan into execution by moving the bulk of the troops from Colesberg and Naaupoort to the vicinity of Modder River Station, where a force of 40,000 fighting men, including 5000 cavalry and a large body of mounted infantry, was concentrated. At the same time, to attract the attention of the Boers to their right flank, a detachment was sent fifteen miles westward to Koodoesberg Drift, with orders to attack a body of the enemy known to be in this locality.

These movements are said to have caused Cronje to conclude that another attack on the Magersfontein position was imminent.

On the 11th February, covered by 7000 fighting men who remained opposite to Cronje, and leaving their tents standing with the object of deceiving the enemy, the rest of the force marched eastwards under Roberts to the Reit River, and then towards Klip Drift on the Modder. The movement of the British infantry appears to have escaped the notice of Cronje, who seems to have been under the impression that the cavalry were undertaking an enterprise similar to that at Koodoesberg. He therefore made only a small detachment to check the British, retaining the bulk of his men at Magersfontein. This detachment failed to stop the cavalry, who reached Kimberley on the 15th, relieving the place and at the same time cutting the line of retreat of Cronje's force in this direction. Meanwhile 8000 British infantry had secured Klip Drift, while 16,000 were at Wegdraai and Jacobsdal.

Alive at last to the danger of his position, Cronje broke up his camp on the night of the 15-16th, and attempted to escape with the bulk of his force in an easterly direction. He was, however, attacked by the troops from Klip Drift on the 16th, who delayed the march of the Boers, and on the 17th they were anticipated at Venutie Drift by a portion of the cavalry. Relying on the efforts of a force of about 5000 men, which was being collected at Koffyfontein to move to his assistance, Cronje now abandoned all attempts to break through the British line; the Boers therefore halted and entrenched at Paardeberg. Here they were surrounded, and on the 27th 4000 men laid down their arms.

While the British were moving against Cronje's communications their own had been raided by a force of about 1500 under De Wet, who, having waited at Winterhoek for an opportunity, succeeded in capturing a supply column of 176 wagons, containing between two and three days' supplies for the British Army. This success, however, exercised no immediate influence on the situation, owing to the resolute action of Lord Roberts, who without hesitation continued his operations against Cronje.

Tactical
success
necessary
to secure
strategi-
cal ad-
vantage

That the strategical advantage of intercepting the enemy's line of communication may be of no value unless followed up by a tactical success, is illustrated by Cromwell's victory at Dunbar.

In July 1650 Cromwell invaded Scotland with 16,000 men, marching from Berwick via Cockburn's Path (a narrow pass between the Lammermuir Hills and the sea), and the coast road. The Scottish general Leslie made no attempt to oppose the English, but fell back on Edinburgh, ordering the country to be cleared of inhabitants and provisions, so as to render the subsistence of Cromwell's force a matter of difficulty.

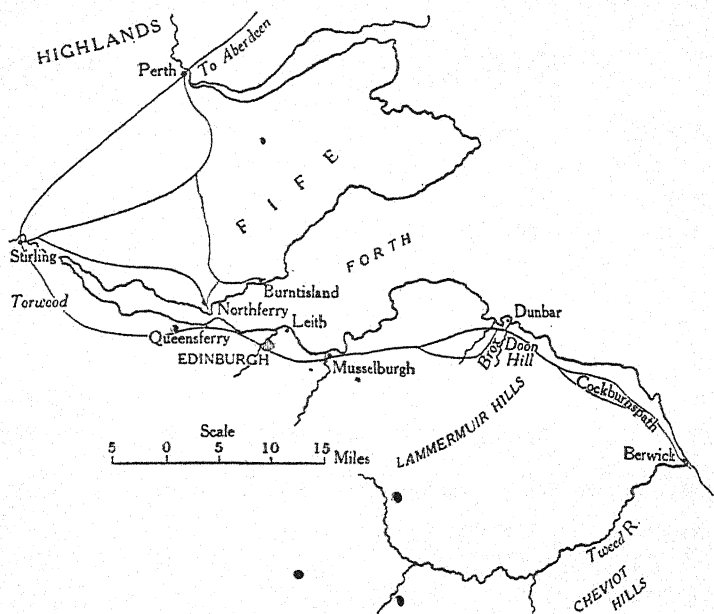
Cromwell
in 1650

Cromwell therefore marched to Dunbar, a fishing village, where a base was established, supplies being brought by sea from England. From Dunbar the English advanced to Edinburgh on the 28th July, where the Scots, some 15,000-16,000 strong, had occupied a position described by Cromwell as being "entrenched by a line flanked from Edinburgh to Leith, and guns also from Leith scouring most part of the ground, so that they lay very strong."

Having in vain endeavoured to draw the Scots out of

their entrenchments Cromwell was obliged, owing to difficulties in regard to supplies, to fall back on the 30th July to Musselburgh, where stores could be landed on the beach. Leslie at once sent his horse out in pursuit, but made little impression on the English, who easily checked their enterprises.

Hostilities were now suspended for several days, but finding that the stormy weather prevented the disembarka-



tion of supplies at Musselburgh Cromwell, on the 6th August, withdrew to Dunbar.

Having revictualled the English again advanced to Musselburgh, to find that the Scots were still clinging to their entrenchments. Cromwell now endeavoured to manœuvre Leslie out of the Edinburgh position, but without success, and on the 28th August was for the second time obliged to fall back to Musselburgh.

Owing to sickness in the army due to wet weather, "upon serious consideration finding our weakness so to increase, and the enemy lying upon his advantage, it was thought fit to march to Dunbar and there fortify the town, which if anything would provoke them to engage."

The English accordingly retired on the night of the 31st August, and reached Dunbar on the 1st September with about 12,000 men, in spite of the close pursuit of the Scots, whose strength had now been raised to 22,000.

During the night of the 1st-2nd September the Scots occupied Doon Hill, an off-shoot of the Lammermuirs, along the foot of which ran the road to Berwick, via Cockburn's Path. The English, therefore, were completely cut off from Berwick by land, while stormy weather prevented the English ships from entering the port of Dunbar.

The situation, which was evidently serious, was described by Cromwell as follows: "We are upon an engagement very difficult. The enemy hath blocked up our way at the pass at Copperspath (Cockburn's Path), through which we cannot get without a miracle almost. He lieth so upon the hills that we know not how to come that way without great difficulty, and our lying here daily consumeth our men, who fall sick beyond imagination."

Although the Scots had thus severed Cromwell from Berwick, they themselves were so placed that if defeated the army would experience difficulty in regaining Edinburgh, for if the Scots were driven southwards the English would have interposed between them and the Scottish capital.

On the 2nd September either to gain shelter from the stormy weather or with the object of more completely investing Cromwell's force, the Scots moved down from their advantageous position on the Doon Hill to the lower ground between the hill and a little brook, the Brox, behind which the English were lying. Early next morning the English attacked and gained a complete victory, 3000 Scots being killed and 10,000 captured, with all the baggage, thirty guns and the ammunition park. The remnant of the Scottish army, 1300 horse, was eventually rallied at Stirling.

Risk of
move-
ment
against
com-
munica-
tions il-
lustrated
Corunna
in 1808

The risks incidental to a movement against the enemy's communications are also illustrated by the Corunna campaign.

After the British victory at Vimiero, in 1808, which had resulted in the evacuation of Portugal by the French, the British Government decided to increase the British army to about 30,000 men. This force was placed under Sir John Moore with orders to operate against the French who, after

first overrunning the country, had subsequently almost been driven from Spain by a popular insurrection. (Map 8 on p. 196.)

Moore landed at Lisbon in October, but owing to difficulties in obtaining transport was not able to take the field for some time; and it was the beginning of December before his main body, some 23,000 strong, which had marched from Lisbon, reached Salamanca. At the same time about 7000 men who had advanced under Baird from Corunna arrived at Astorga.

Meanwhile, Napoleon had again invaded Spain with a large army, and after scattering the Spaniards had, (according to the information at the disposal of Moore), advanced on Madrid with the bulk of his forces, leaving only a few troops to the west of Segovia.

Moore now resolved to create a diversion in favour of the Spaniards, believed to be holding out in Madrid, by the bold expedient of advancing against Napoleon's communications with France, which ran through Valladolid and Burgos. It was calculated that this movement would oblige the Emperor to detach a considerable force to clear his communications; and Moore could then, if necessary, abandon his own communications with Lisbon and fall back into Galicia, basing himself on Corunna and drawing the French into this distant and inhospitable area.

No sooner had the advance of the British commenced than Moore learnt from an intercepted despatch that the French had taken Madrid, and that the army was about to be broken up and sent in various directions to deal with such Spanish forces as still held the field: further, that Soult, who with 15,000 men was in the neighbourhood of Saldanha, was destined to operate with two divisions in Leon.

Moore determined to seize this favourable opportunity of attacking and defeating Soult, and if possible co-operating with a Spanish force then holding Leon; but, on the 22nd December, when the British were advancing from Sahagun to the Carrion, news came to hand that the Emperor was hurrying in a north-westerly direction with a large force from Madrid.

On the 19th December Napoleon had heard of the occupation of Valladolid by the British; and at once fathoming

Moore's plan he determined to retaliate by intercepting the communications of the British with Lisbon, and also, should they retire into Galicia, interposing between them and the Galician ports.

To this end a force of about 50,000 men was despatched from Madrid towards Tordesillas and Rio Seco, while Soult was ordered to fall back before the British, should they continue to advance, with the object of facilitating their interception. Should Moore take alarm and begin to retire, Soult was to pursue closely and delay his movements.

Moore now rapidly withdrew in two columns, one by Valencia de Don Juan on Astorga, the other by Castrogonzalo on Benevente, leaving the Spaniards at Leon city.

Benevente was evacuated by the British rear guard on the 29th December, after some skirmishing with the advanced troops of the Emperor's army.

On the 30th the British, and the Spaniards who had been engaged with Soult, were at Astorga.

The British and their allies made good their escape, clearing Astorga on the next day; and on the 1st January the Emperor and Soult effected a junction at Astorga, where 70,000 men were concentrated.

THREATENING THE ENEMY'S COMMUNICATIONS.

A commander risks much in placing his army actually astride the enemy's communications. Less drastic methods, therefore, are often employed; and when the direction of roads and railways is favourable a leader may move his forces into a position menacing the security of the enemy's communications. In these circumstances the enemy may be obliged either to retreat without fighting, which cannot fail to be detrimental to his prestige; or should battle be accepted it will be fought under conditions involving separation from his principal communications in case of defeat, with all the consequent disadvantages.

This manœuvre, however, clearly does not lend itself to the attainment of such rapid and decisive results as when the enemy is surrounded or when his communications are severed; and, in addition, an army which threatens the enemy's communications often exposes its own to an effective counter-attack while engaged in manœuvring for position; a

circumstance of which it may be safely reckoned that the enemy will attempt to take advantage. On the other hand, the risk of irreparable disaster to the force that is manœuvring against the enemy's communications will as a rule be smaller than when his complete envelopment or the interruption of his communications is attempted; since the attacking army, if defeated, should experience less difficulty in regaining its own communications.

The Jena campaign of 1806, between the French and Bavarians on one side and the Prussians, Saxons and Russians on the other, is an example of a campaign in which both forces were in position parallel to their respective lines of communication. (Map 3 on p. 124 and Map 13 on p. 260.)

At the beginning of October 1806, while the Russian army was still on the Niemen, the Prussian and Saxon forces were disposed generally as follows. The main army under the Duke of Brunswick, about 60,000 strong, was round Erfurt, a force under General Ruchel of some 30,000 lay near Eisenach, and a detachment of 12,000 under General Blücher was in Westphalia to the west of Ruchel; Prince Hohenlohe's corps, some 45,000, stood at Jena and Roda, with a detachment, under General Tauenzien, round Hof covering Saxony, and 15,000 men under the Duke of Würtemberg were at Magdeburg. The lines of communication of the Prussians led to Magdeburg, Wittenberg, and Torgau, those of the Saxons to Dresden.

Before the commencement of the campaign Napoleon seems to have inferred that since the Prussians had declared war they would attempt to take the offensive. It was also thought probable that their army would move away from Berlin against the French, the main body of whose forces was in Bavaria. It was concluded, therefore, that if arrangements could be made for the French to march on the Prussian capital from a direction which would place them between it and the army, the Prussians would be forced into a difficult position. At the same time the French army would have been thrust into the district dividing the Prussians from the Saxons, if the latter had not joined the Prussians, and also between the Prussians and the Russians.

The Emperor's plan is summarized in a letter to his brother

Louis, "My intention is to collect all my forces on my right, leaving the entire area between Bamberg and the Rhine without troops, in order to insure that nearly 200,000 men may concentrate on the same battle-field. If the enemy pushes parties into the area between Maintz and Bamberg it will not trouble me, for my line of supply will be to Forcheim, a strong little place, and thence to Würzburg."

Napoleon therefore drew the bulk of his army, consisting of eight corps, besides the cavalry and a force of Bavarians, and amounting to about 160,000 men, to Coburg, Bamberg and Amberg, leaving one corps (the 2nd) standing in Illyria and north of Trieste. As has been pointed out (p. 123), the French lines of communication ran from the Rhine at Maintz and Mannheim, and from the Danube at Ulm and Augsburg; and advanced bases had been formed at Forcheim, Bamberg and Kronach.

At the commencement of hostilities, in a letter dated the 5th October, Napoleon informed Marshal Soult that the Prussians and Saxons were apparently at Erfurt and seemed inclined to operate against the French left. The French army notwithstanding would enter Saxony in three columns. Soult's 4th Corps was to lead the right wing via Amberg and Bayreuth on Hof; half a day's march behind would be Ney's 6th Corps, and half a day behind Ney 10,000 Bavarians, making in all a force of more than 50,000 men. Bernadotte's 1st Corps would be at the head of the centre, moving by Kronach, Lobenstein and Schleiz. This would be followed by Davoust with the 3rd Corps, then would come the bulk of the reserve cavalry under Murat, and lastly the Guard, the total being about 70,000 men. On the left Lannes with the 5th Corps would advance through Coburg, Grafenthal and Saalfeld, followed by the 7th Corps under Augereau, in all 40,000 men. The French, moving in close mass, would therefore be in position to attack the enemy wherever met, and with twice as many men as he could bring into line.

The French began to advance on the 8th October. On the 9th Murat and Bernadotte beat Tauenzien at Schleiz; and on the 10th the information at the disposal of Napoleon pointed to the fact that the main body of the Prussians was at Weimar.

Meanwhile the Prussians and Saxons, who at first had

contemplated a movement across the middle portion of the Main with the object of cutting Napoleon off from Maintz, had on the 7th October resolved to await the French in the vicinity of Erfurt. An attack was to be delivered as they issued from the Thuringer Wald, this being considered their most probable line of advance. On the next day, however, news came in that Napoleon was marching from Bamberg in a north-easterly direction, and it was now decided to move the army eastwards into position to attack the left of the French on the 11th or 12th October. The main body under Brunswick was to march to the area south of Weimar, while Hohenlohe's force moved to Kahla and Rudolstadt, and Ruchel's Corps was drawn towards the remainder. At the same time a detachment of about 15,000 men, which had been sent into Franconia under the Duke of Weimar to operate against the French communications, was recalled to Weimar.

On the 10th October Lannes met and defeated the advanced troops of Hohenlohe's force at Saalfeld. On the 12th Napoleon heard that the enemy was concentrating at Erfurt. Intent on cutting off the allies from Berlin and Dresden, he ordered the left column to Jena and Kahla, the centre, less the Guard, towards Naumburg, and Soult and the Guard to Gera; Ney was to be brought to Mittelpolnitz, and the Bavarians to Plauen. In a letter to Lannes the Emperor remarked that "All the enemy's intercepted correspondence points to the fact that he has lost his head. The generals confer day and night, but are at a loss what to do."

- When news came to hand, on the 12th, that the French were near Jena and had occupied Naumburg, seizing a large magazine located there, the allies decided to recover Naumburg and open a line of retreat to the Elbe at Wittenberg. Hohenlohe was therefore ordered to remain near Jena, facing a French force known to be in this neighbourhood, Ruchel was to move to Weimar, while Brunswick marched to Naumburg, and the Duke of Weimar rejoined Hohenlohe as soon as possible.

On the 13th Napoleon issued two bulletins to his army in which the situation was described to the troops. In the first it was pointed out that while the French army was marching against the Prussians with its back to the Elbe, the

enemy were standing with their backs to the Rhine—"a strange situation from which events of the greatest importance should result." In the second he claimed that the Prussian army had been caught "in the very act," had been turned, and was retreating on Magdeburg, but that the French army had already gained three marches on the Prussians. The Guard, Soult, Augereau, and Ney were now ordered to join Lannes at Jena, where a large force of Prussians, believed to be the whole army, was visible. Davoust, Bernadotte and Murat, who were to move on Dornburg, were to converge on Jena if the sounds of battle were heard from this direction.

On the 14th the allies were defeated, Napoleon with 90,000 men routing Hohenlohe and Ruchel who had 50,000 at Jena, while Davoust with 30,000 men beat Brunswick's force of 50,000 at Auerstädt. Owing to a misunderstanding in regard to an order Bernadotte's Corps was not engaged.

On the field of battle the Prussians lost 20,000 killed and wounded, and the French captured 20,000 prisoners. The story of the pursuit and capture of the remnants of the Prussian army has already been told (p. 58).

Sala-
manca
in 1812

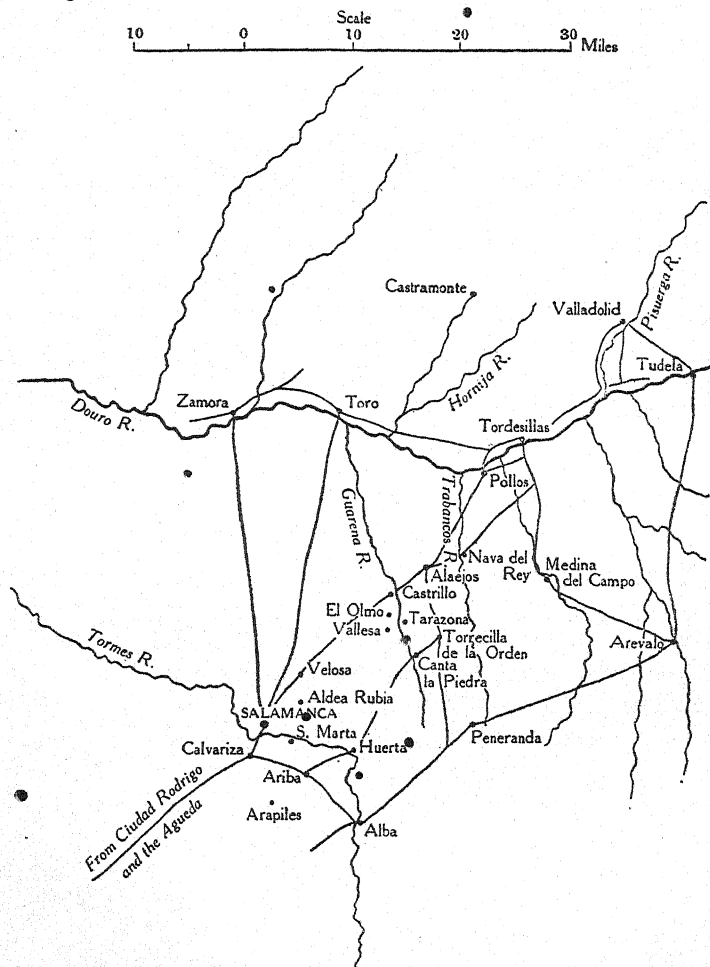
The hazards attendant on an unsuccessful venture of this kind are illustrated by the Salamanca campaign.

In June 1812 Wellington took the field with about 42,000 men and advanced from the Agueda against a French army, under Marmont, of about the same strength which was standing behind the Tormes and Douro, with advanced posts pushed out southwards.

At first Wellington met with some success, and by the 2nd July the forts at Salamanca had been captured from the French, after which Marmont had been forced to withdraw his whole force behind the Douro. Here the French took up a strong position, their left resting on the Pisuerga, which was now unfordable, the centre at Tordesillas, and the right at Pollos; Toro and Zamora being also fortified and garrisoned.

The principal crossings over the Douro were in the hands of the enemy and the river was so high as to render the fords difficult; Wellington, therefore, resolved to suspend his advance until the water fell, or the operations of the Spanish guerrillas against the French line of communications to France forced Marmont to make detachments. The British army, consisting of the 1st, 3rd, 4th, 5th, 6th, 7th,

and Light divisions, and four British cavalry brigades, was therefore posted in the area lying between Tordesillas, Pollos, and Medina del Campo; at the same time a body of 1200 Portuguese cavalry under D'Urban was detached to Castra-



monte to menace the communications of the French in concert with a Portuguese force under Silveira.

On the 8th July, Marmont received a reinforcement which raised his numbers to about 45,000, and without waiting for a body of 14,000 men, under Drouet, which was marching from Madrid to join him, began to manœuvre against Wellington. The French army was therefore concentrated on the

15th and 16th between Toro and the Hornija; and at the same time a portion of the troops was pushed south of the Douro so as to menace Wellington's communications to Salamanca and Ciudad Rodrigo. Having recalled D'Urban, Wellington met this threat by drawing the 1st, 3rd, 5th, 6th and 7th divisions and three cavalry brigades to the Guarena; but since there was still some doubt as to the intentions of the enemy, separated his forces, leaving the 4th and Light divisions and a cavalry brigade on the Trabancos.

Marmont now marched his army rapidly eastwards along the north bank of the Douro, and crossing the river at Pollos and Tordesillas concentrated his troops at Nava del Rey by the evening of the 17th, some units having covered eighty miles in forty-eight hours.

Wellington consequently moved the cavalry to Alaejos, and the 5th division to Torrecilla de la Orden in support of his right. On the 18th the French forced the 4th, 5th, and light divisions and the cavalry to fall back behind the Guarena, and then concentrated near Castrillo opposite the British. Next day Marmont moved to Tarazona, while Wellington brought his whole army into position facing the French between Vallesa and El Olmo. On the 29th, covered by a strong rear guard, Marmont marched to Santa la Piedra, and crossing the Guarena succeeded in gaining the ford of Huerta on the Tormes, the British only reaching Aldea Rubia and Velosa. The 21st saw the French occupy Alba and also cross the Tormes to Ariba, and therefore closely threaten the communications of the British with Ciudad Rodrigo. The British, meanwhile, with the exception of the 3rd division, which remained east of Salamanca, moved to the line Arapiles-Santa Marta, that is, to a position nearly parallel to their line of communications, which was oblique to the front of the army.

Notwithstanding that a reinforcement of cavalry from the north was at hand, and that Drouet's detachment was not far distant, Marmont resolved to force on a battle while the British were in a disadvantageous position; and on the 22nd he detached two divisions and some cavalry to menace the Ciudad Rodrigo road. Taking advantage of this movement, Wellington attacked and beat the French in detail, causing them a loss of 14,000 men, half of whom were prisoners.

Since Marmont's enterprise against the communications of the British had caused him to uncover the line by which he had advanced, the French were obliged to escape by a roundabout route, retiring via Alba, Peneranda, and Arevalo to Tudela, in order to regain their line of communications.

"This," says Napier, "was a wonderful retreat...the pursuit, however, was somewhat slack."

It occasionally happens that both commanders operate against each other's communications. Mutual
menace
to com-
munica-
tions

In these circumstances the advantage will lie with the general whose movements most seriously threaten the enemy's line of supply, or who has most to gain and least to lose by continuing his operation. If there is no advantage in these respects, the general whose character is less resolute, or whose army is less formidable or mobile, will give way.

These principles are in part illustrated by the campaign of 1651 in Scotland.

After the battle of Dunbar, bad weather and an illness Cromwell
in 1651 prevented Cromwell from carrying the war into the Highlands, and it was not until the following spring that active operations were recommenced. A relapse of his illness then again delayed Cromwell's operations; but finally, in July, he advanced with 16,000 men against the Scottish commander Leslie, who during the long respite had again raised a force of about the same strength, and following his former policy had occupied a strong position at Torwood near Stirling. (Map on p. 155.)

- Cromwell now decided to dislodge Leslie by crossing the Forth, an enterprise rendered possible by his possession of the command of the sea. This movement would also sever the communications of the Scots with Fife, Perth, and Aberdeen, whence Leslie drew his supplies, and Perth was now the seat of the Government of King Charles II.

On the 19th and 20th July a detachment of 5000 English, under Lambert, was accordingly pushed from Queensferry to Northferry, while Cromwell advanced as if to attack Leslie, and so diverted attention from the turning movement.

On the 20th Lambert beat a force of 4500 men from Leslie's army, whereupon Leslie fell back to Stirling followed by Cromwell. The latter now turned back and rapidly moved

the remainder of his army across the Forth, and having captured the port of Burntisland as a base, marched on the 30th against Perth; at the same time orders were sent to General Harrison (who had been left at Edinburgh with 3000 horse) to move to England should Leslie break away southwards.

Charles had indeed resolved to counter Cromwell's operations by advancing via Carlisle into England, where it was hoped that a rising would take place in his favour. It was also known that the only force available in the northern counties to arrest his march was not more than 5000-6000 strong, detachments from which had been thrown out to watch the passes over the Cheviots.

Cromwell did not hear definitely of this movement until Perth was reached on the 1st August. Leaving 5000 men to besiege Stirling Castle, held by a Scottish garrison, he at once conformed to the march of the Royalists, repassing the Forth on the 4th August.

On the 3rd September the Royalists were finally defeated at the battle of Worcester.

MOVING PART OF AN ARMY AGAINST THE ENEMY'S COMMUNICATIONS.

The relative strength and position of two armies, or the direction taken by their lines of communication, may not be favourable for an advance by the whole of one army against the other's line of communications. In these circumstances a commander is sometimes content to move part only of his force against the enemy's line of communications while the remainder march directly against the enemy.

This method possesses the advantage that a portion of the army protects its own communications, which will not be endangered in case of reverse. The enemy, moreover, must meet this manœuvre by falling back, which will be disadvantageous. Alternatively he may stand fast and fight while detaching a sufficient number of troops to secure his communications; he may ignore the threat against them and accept battle by attacking our main body; or may contain our main force and attack the troops moving against his communications. If, however, the enemy does stand to fight and is beaten, the defeat will also probably involve loss of his

communications and the fear of this contingency is likely to lower the *moral* of the commander and his troops. Further, the portion of the attacking army directed against the enemy's communications will often be able to strike the flank of the position where battle is accepted, which will increase the probability of tactical success.

On the other hand, the probability of achieving decisive victory will not be so great as in the case when the whole army operates against the enemy's communications, for it will evidently be more difficult to sever them. In addition, the attacking army must be separated into two portions, and will therefore be exposed to defeat in detail, a circumstance which the enemy will endeavour to turn to his advantage. Superiority of numbers or efficiency, therefore, favourable conditions as regards topography, such as the number and direction of roads and railways, and above all timely, vigorous and skilful execution will be especially necessary for the attainment of success.

Wellington's Vittoria campaign supplies an instance of a successful operation of this character. (Map 8 on p. 196.) Vittoria
in 1813

In the spring of 1813 the British, Spanish, and Portuguese forces under Wellington, and the French under King Joseph, were disposed generally as follows. In Catalonia, Valencia, and Aragon nearly 70,000 French under Suchet were facing a British force of about 16,000 under Murray, who was in Valencia, together with the Spanish 1st Army of 8000 which was operating under Copons in Catalonia, the Spanish 2nd Army under Elio in Murcia, and various bands of irregulars. The French Army of the South, 45,000 strong, had been parcelled out at Avila, on the Tietar and in La Mancha so as to cover Madrid, and this force was supported by the French Army of the Centre, a body of 16,000 men, which was retained near the capital. Opposed to these troops was Del Parque with 15,000 men in the Sierra Morena, and behind him to the south of the Sierra Morena stood the Spanish 1st Army of the Reserve in Andalusia. There was also a Spanish force of 8000 in Spanish Estremadura, and the right of the Anglo-Portuguese Army, 20,000 strong, was under Hill at Coria, Placentia, and Bejar. The French Army of Portugal, 40,000 bayonets, was disposed along the Esla

and the Tormes, watching the main body of the Anglo-Portuguese Army, 55,000 men; of this two divisions were at Castello Branco and in the province of Beira, one division on the Agueda, and the remainder in quarters on the line of the Douro from Lamego westwards. Finally, the French Army of the North, 45,000 men, was guarding the French communications in Biscay and Navarre against bands of guerrillas, who were supported by the Spanish 4th Army, consisting of some 40,000 Galicians, Asturians, and others under Castanos.

In the campaign of 1812 Wellington had at first been checked on the line of the Douro (p. 162). In the interval this position had been strengthened, since most of the bridges had now been destroyed and entrenchments had been made in many places on the right bank. Therefore while arranging for vigorous action to occupy the French in other quarters, Wellington devised a bold plan for turning this line, and attacking the French at their most vital point, the communications with France via Biscay. It was consequently decided that about half of the Anglo-Portuguese Army, under Graham, should cross the lower portion of the Douro, and then advance along the right bank to the Esla. From the Esla, in conjunction with 12,000 Galicians, and the 8000 Spanish troops who were to join them from Estremadura, the Anglo-Portuguese were to march against the French communications, which led northwards via Burgos and Vittoria. Meanwhile the rest of the army was to force the passage of the Tormes and drive the enemy, whose resistance would be weakened by the threat to his communications, from the Douro. Further, with the object of deceiving and distracting the attention of the French, Del Parque's force and the 1st Reserve Army were to advance on Madrid.

About the middle of May Del Parque began active operations in La Mancha, and the 1st Reserve Army advanced towards Almaraz on the Tagus. These movements, together with the presence of Hill's troops at Coria, and the fact that depôts of supplies had been formed there as well as at Penamacor, Ciudad Rodrigo, Almeida, Celorico and Viseu, caused the French to believe that a converging movement on Madrid from east, south and west was about to take place. Large numbers of troops, therefore, were kept round the capital

Graham now set off on his outflanking movement, and on the 22nd Wellington pushed his right, 30,000 strong, towards the Tormes, Hill marching with one group from Bejar on Alba while Wellington with the remainder advanced on Salamanca. King Joseph, who had transferred his head-quarters from Madrid to Valladolid, could now dispose only of some 45,000 men to meet the advance of Wellington's army. A detachment of no fewer than 20,000 men had been sent away to assist the Army of the North in clearing the French communications, which were endangered by the activity of the irregulars and of the troops under Castanos; and doubts as to the intentions of the allies had, as has been stated, chained large numbers of troops to Madrid. The French, in consequence, were unable to offer serious resistance, and were driven from the Tormes; and by the 1st June the left column of Wellington's force under Graham was at Zamora, the right opposite Toro.

Finding themselves outflanked the French fell back on the 3rd June, crossing the Carrion on the 6th, where King Joseph assembled 55,000 men.

The British followed in three columns, and on the 7th passed the Carrion, the French retiring to Castro Jeriz and Burgos. Wellington now again outflanked the enemy, pushing his left and the Galicians over the Upper Pisuerga on the 8th, 9th and 10th June, while Hill with the right advanced on Burgos, which was evacuated by the French on the 13th. Still continuing his outflanking operation, Wellington moved Graham and the Galicians over the Ebro at Rocamonde and San Martin, while Hill crossed the river at Puente D'Arenas. The whole army, with the exception of one division retained at Medina de Pomar to guard the supplies and to open up a line of communication with Santander, then marched towards the Briviesca-Bilbao road between Frias and Orduna, and in such direction as to menace the French communications at Vittoria.

Again the French gave way, but halted at Vittoria, where 70,000 men were concentrated. Here a position was occupied which, however advantageous in other respects, possessed the serious drawback that the main line of retreat to Tolosa lay behind the right flank of the army.

Wellington now advanced in three columns, the left

under Graham, with whom were 20,000 men in addition to the Galicians, moving towards a point on the Vittoria-Tolosa road immediately north of Vittoria; the centre and right, about 50,000 strong, directly against the enemy. The British were victorious in the battle which ensued, the French being forced off their main line of retreat and falling back in the direction of Pampeluna. The French lost "all their equipages, all their guns, all their treasure, all their stores, all their papers...generals and subordinate officers alike were reduced to the clothes on their backs, and most of them were bare-footed."

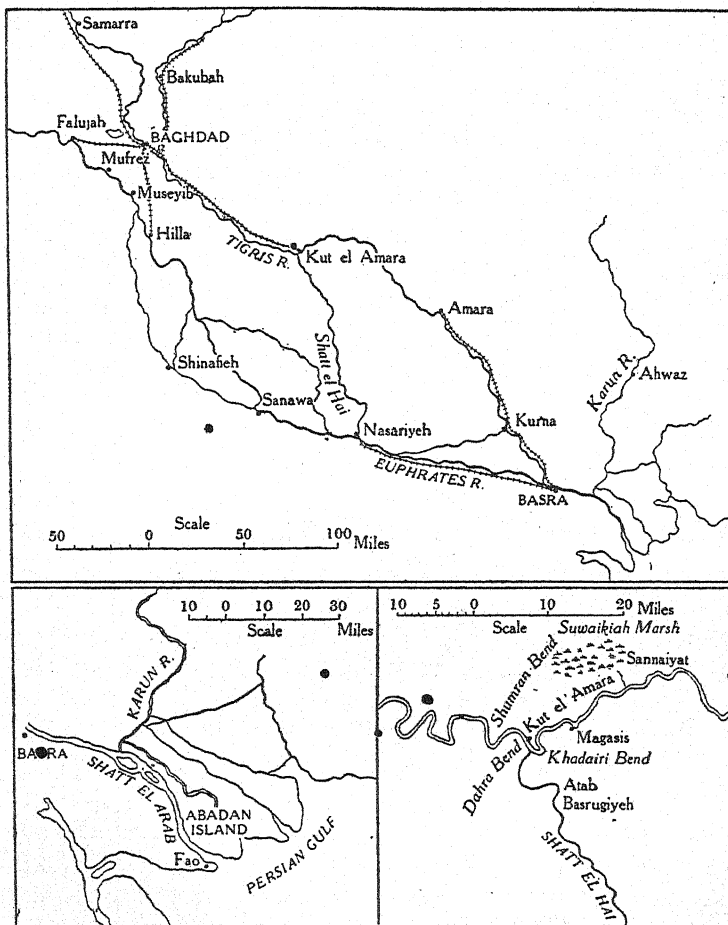
Maude in
1917

General Maude followed a similar policy during the operations which resulted in the eviction of the Turks from their positions round Kut-el-Amara in 1917.

After the surrender in the spring of this year of the British force which had been invested in Kut-el-Amara, the Turks settled down to hold a series of strong positions, astride the Tigris, with a force of three divisions belonging to the 18th Corps and comprising about 30,000 men. Their left lay strongly entrenched at Sannaiyat between the Suwaikiah marsh and the Tigris, which is here about three hundred and fifty yards wide; the north bank of the river was held as far as Kut-el-Amara; and another line ran from a point on the Tigris two miles east of Kut-el-Amara down the Shatt-el-Hai for about ten miles, and was continued across this stream in a north-westerly direction. The Turkish line of communication led along the north bank of the Tigris to Baghdad.

The British force which stood opposite to the Turks on the north bank of the Tigris, and also held the south bank as far west as Magasis, consisted of a cavalry division, and two corps, the 1st and 3rd, comprising four infantry divisions, a total of about 50,000 fighting men. Leaving the 1st Corps to contain the Turks who were holding the Sannaiyat position and to cover the British communications to Basra, Maude sent the cavalry and 3rd Corps over the Hai at Atab and Basrugiyeh on the night of the 13-14th December, 1916; and by the 22nd the British had worked northwards to the Tigris at a point south-east of Kut, although the Turks still held the south bank of the river both at the Khadairi bend and at the point where the Hai leaves the main stream.

Operations were now checked by rain, which rendered the ground impassable by troops; and it was not until the 7th January, 1917, that the Khadairi positions could be attacked. These were taken on the night of the 18-19th: a week's further delay then ensued before the capture of the



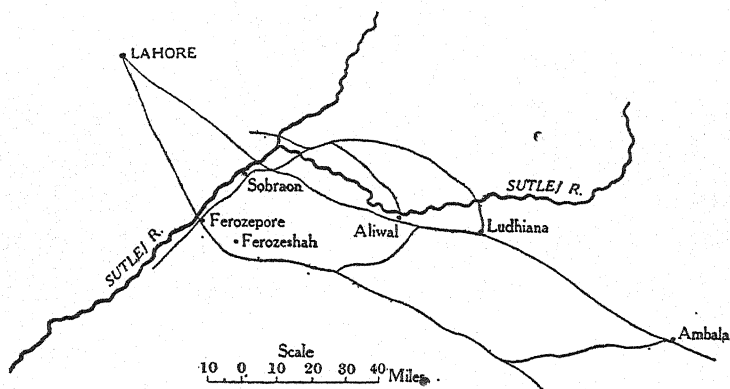
enemy's position astride the Hai could be attempted, but finally the Turks were evicted on the 4th February. The only forces of the enemy now remaining south of the Tigris were some troops holding a line across the Dahra bend; and these were attacked on the 9th February, and by the 16th had been driven across the river.

The waterlogged state of the ground again necessitated

a pause in the operations; but on the 22nd Sannaiyat was attacked by the 1st Corps, and feints were made at Magasis and Kut-el-Amara to divert the enemy's attention from his right. On the 23rd this flank was attacked by a division, which forced the passage of the Tigris at the southern portion of the Shumran bend, while at the same time pressure was maintained against the Sannaiyat position, twenty miles away to the east, by the 1st Corps. The next day a second division and the cavalry crossed at Shumran, and the Turks were pushed back from Sannaiyat to Kut-el-Amara. On the 25th the Turks had abandoned Kut-el-Amara and were in full retreat (p. 59).

Sikhs in
1845

The disadvantages of this manoeuvre are illustrated in the First Sikh War of 1845-46.



At the beginning of the war some 70,000 Sikhs invaded British territory, advancing across the Sutlej. Gough, the commander-in-chief in India, thereupon marched to meet them with 6000 British and 10,000 Native soldiers, and on the 21st December, 1845, defeated a detachment of 25,000 of the enemy at Ferozeshah. The Sikhs then fell back over the Sutlej.

The British had lost so heavily in the battle that Gough was unable at once to follow the enemy; but on the 27th, close contact was established with the Sikhs, who in the interval had again passed the river and established themselves on the left bank at Sobraon. Here so formidable a line of entrenchments had been made that it was decided to await the arrival of reinforcements before delivering an attack.

Soon afterwards the Sikhs received so large an accession of numbers from Lahore, that they felt able to detach a force of 24,000 men, including 4000 regular infantry and 7000 irregular cavalry, under Runjur Singh. These were to menace the British communications to Ambala, with the object either of dislodging the British from their position opposite Sobraon, or of obliging them to make large detachments and therefore to afford the Sikhs an opportunity of successful action.

This force crossed the Sutlej in the vicinity of Ludhiana, and invested the British garrison of about 2500 men.

During the first week in January reinforcements to the number of about 4500 reached Gough, who, on the 17th, sent Sir Harry Smith with about 9000 men to relieve Ludhiana and deal with the Sikhs under Runjur. As a result they were brought to battle on the 28th January at Aliwal, and were defeated with a loss of 6000 men.

Meanwhile the main force of the Sikhs, though about 40,000 strong (including 10,000 cavalry), had remained inactive, and on the 7th February Smith was able to rejoin Gough in time to take part in the battle which was fought three days later. On the 10th Gough, whose army had now been raised to a strength of 30,000, stormed the Sikh entrenchments at Sobraon, inflicting a severe reverse on the enemy who were thus beaten in detail.

Slowness and hesitation, therefore, are fatal to success when operating with a detachment against the enemy's communications. It will likewise be useless to detach a force so small that its action will not produce the desired effect.

In 1915, in Mesopotamia, during the advance of the British force of about 13,000 fighting men on Kut-el-Amara, 2000 Turkish cavalry were detached against the British river communications with Amara, and succeeded in sinking a number of transport vessels. This raid was ignored by General Townshend, but the absence of this body of cavalry probably enabled the British to outflank and defeat the Turks in the battle of the 28th September. (Map on p. 171.)

Examples
of weak
and distant
detach-
ments

The operations of a detachment sent to too great a distance from the main body are also likely to be disregarded, and the enemy will then be able to turn with all his forces against

the main body. During the war of American Independence, in 1780, the American commander Gates advanced from Hillsborough on the 27th July with about 3500 men against the British post of Camden, held by some 2000 British and 800 loyal American militia. (Map on p. 80.) The Americans reached Rugeley's Mills on the 13th August, and on the next day a detachment was sent to join a partizan leader, named Sumter, in an attack on the British communications with Charlestown to the south of Camden. Cornwallis, the British commander, arrived at Camden on the 14th August, and taking 1500 British and 500 militia advanced on the night of the 15th to attack Gates and, if possible, defeat the Americans in detail. The two forces met nine miles from Camden and the Americans were beaten in the action that followed. Assuming that Sumter would retire as soon as he heard of the defeat of Gates, Cornwallis now sent 350 men to try and intercept him. These surprised Sumter's detachment of 800, of whom 350 were killed or captured.

Applica-
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against
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The great war of 1914-18 was not without examples of the application of these principles on a continental scale, the objective being to sever the communications between nations instead of those uniting armies with their immediate bases. The attack undertaken by the British and French on the Gallipoli peninsula appears, for instance, to have been made with the intention of severing the communications between the Turks and the Germanic Powers, and at the same time of opening up easy communication with Russia. Though costly in men—and on a considerable scale having regard to the British forces then available—(p. 51), it was, however, little more than a raid if considered in relation to the magnitude of the operations elsewhere. Like the raid in Mesopotamia, the attack was practically ignored by the Central Powers until, in October 1915, they undertook the conquest of Serbia, and established for themselves a direct line of communication through friendly territory to Constantinople. (Map 2.)

The offensive of the German submarines against the sea communications of the Western Powers belongs to the same category. The German High Seas' Fleet, which remained as a standing menace to those of the allies, was used as a

containing force. At the same time it was apparently hoped that the operations of the submarine detachments would not only oblige the British and French to weaken their fleets; but would prejudice the military operations of the Western Powers by restricting the importation of food, raw materials and munitions, and also possibly result in the starvation of the people of the United Kingdom. As the British and French were unable to attack the German fleet owing to the presence of mine fields and coast defences, they were obliged to employ considerable forces to parry as best they could the efforts of the submarines: on the other hand the submarine offensive was handicapped by the absence of direct co-operation on the part of the German fleet, and was in consequence indecisive.

Commenced, apparently, with the object of assisting the Serbians (p. 13), the expedition to Salonika became in the end a detachment from the main armies of the Western Powers for the same purpose as had prompted the despatch of troops to Gallipoli. After the defeat of Serbia in 1915, it fell, therefore, to the Bulgarians, with some stiffening of German and Austrian troops, to guard the lines of rail and water communication leading from Austria to Turkey, and a deadlock ensued for nearly three years. The failure of the German offensive in the west in 1918 and the war weariness of the Bulgarians then resulted in the collapse of Bulgarian resistance before the attacks of the French, British, Serbian and Greek forces; and so hard pressed were the Germans, Austrians and Turks elsewhere that troops could not be spared to prop up their allies. As a result Bulgaria surrendered on the 30th September, 1918 to the Western Powers, who quickly regained possession of Serbia. The Turks, whose direct line of communication with the Central Powers had now been broken, and who were also under the influence of severe reverses in Palestine and Mesopotamia, then made terms with the Western Powers at the end of October. On the 3rd November the Austrians, who in the meanwhile had been defeated by the Italians, also surrendered; and on the 11th the Germans, disheartened by continued reverses in France and Belgium since the middle of July, suffering severely from lack of food, and deserted by their confederates, signed an armistice with the Western Powers and the United States.

OPERATIONS WITH THE OBJECT OF DEFEATING
THE ENEMY IN DETAIL.

When the enemy's forces are dispersed, and especially when energetic co-operation between the divided portions is unlikely, owing either to the fact that they belong to a coalition of nations, or that jealousy exists between their commanders, the aim will usually be to defeat them in detail.

If the hostile armies have adopted a linear formation, their defeat will generally be attempted by attacking either the centre or one or other flank, and after beating these troops by attacking the remainder before they can concentrate or render assistance. When the enemy's troops are disposed in depth and are not well closed up, the attack may be made either against those in front, against the centre, or against the rear. The principal advantage of this method is clearly that the attacker may expect by concentration of effort to employ his forces with the greatest effect. On the other hand, even in the most favourable circumstances, complete victory will not be as rapidly attained as when the enemy's whole force is surrounded, separated from its base, or even driven from its communications, because the first success will be gained over part only and not the whole of his armies.

The most effective reply to an attempt to defeat an army or armies in detail will generally be strong action by the portions which are not subjected to the main attack, with the object of reducing its force or counteracting its results. When an attempt has been made to force the enemy's centre, which is the point where his armies can most quickly concentrate, it may be expected that the troops on the flanks will endeavour either to move in and enclose the attacker, or to intervene indirectly in such a way as to oblige him to forego his plans. When the attack is made against the leading or the rear troops of a column, or upon a wing of a line, the remainder may try to come up and envelop the attacker; or, if this is impracticable owing to the distances that must be covered and the time available, may endeavour to make a diversion. It follows that success or failure in operations for the purpose of defeating the enemy in detail will largely depend on the skill and vigour with which the attack is

prosecuted, for it is clearly essential that the enemy should not be allowed to gain time for an effective counterstroke.

The Waterloo campaign affords a well known example of the initial success and, owing partly to their close co-operation, of the final failure of an attempt to beat allied armies in detail by attacking the centre of their line (see also p. 111). Waterloo in 1815

In June 1815 the Anglo-Dutch-Belgian army, under Wellington, about 100,000 strong, was standing with the 2nd Corps from Grammont to Ath, the 1st Corps from Enghien to Quatre Bras, and the reserve at and near Brussels. The Prussians, commanded by Blücher, and numbering about 120,000, had the 1st Corps near Charleroi, the 2nd Corps near Namur, the 3rd Corps near Ciney, and the 4th Corps near Liège. (Map 7 on p. 178.)

On the morning of the 15th June Napoleon, who had concentrated his army of 125,000 men near Phillipeville and Beaumont, advanced across the Sambre at Châtelet, Charleroi and Marchienne au Pont, driving back Ziethen's Prussian 1st Corps. By nightfall the French 3rd, 4th, and 6th Corps, the Guard, and the bulk of the cavalry were between Charleroi and Fleurus; and Ney, who with the 1st and 2nd Corps, about 45,000 men, had been ordered to seize the Quatre Bras cross-roads and contain the Anglo-Dutch-Belgians, was at Gosselies and Marchienne au Pont, with a detachment at Frasne.

Meanwhile, on receiving news of the advance of the French on the 15th, Blücher had ordered his army to concentrate at Sombref; and in the evening Wellington also issued instructions for a general movement eastwards of the 1st and 2nd Corps, and the reserve advanced towards Quatre Bras.

On the 16th Napoleon defeated the Prussian 1st, 2nd and 3rd Corps at Ligny, the 4th coming up after the battle. On the same day Ney at Quatre Bras fought an indecisive action against about 30,000 Anglo-Dutch-Belgian troops. Napoleon had therefore struck a severe blow at the scattered forces of the allies before they were able to concentrate.

After detaching the 3rd and 4th Corps, about 30,000 strong, under Grouchy to pursue the Prussians, who had

retired during the night, Napoleon on the 17th advanced against Wellington, now standing with 40,000 men at Quatre Bras.

The Anglo-Dutch-Belgians consequently fell back on Waterloo. Here Wellington had resolved to accept battle if Blücher could detach one corps to his assistance. The remainder of his available troops were therefore ordered to concentrate at Waterloo, with the exception of a detachment of a division of the 2nd Corps, about 18,000 men, retained at Hal and Enghien, apparently to guard against an advance by the enemy from this direction.

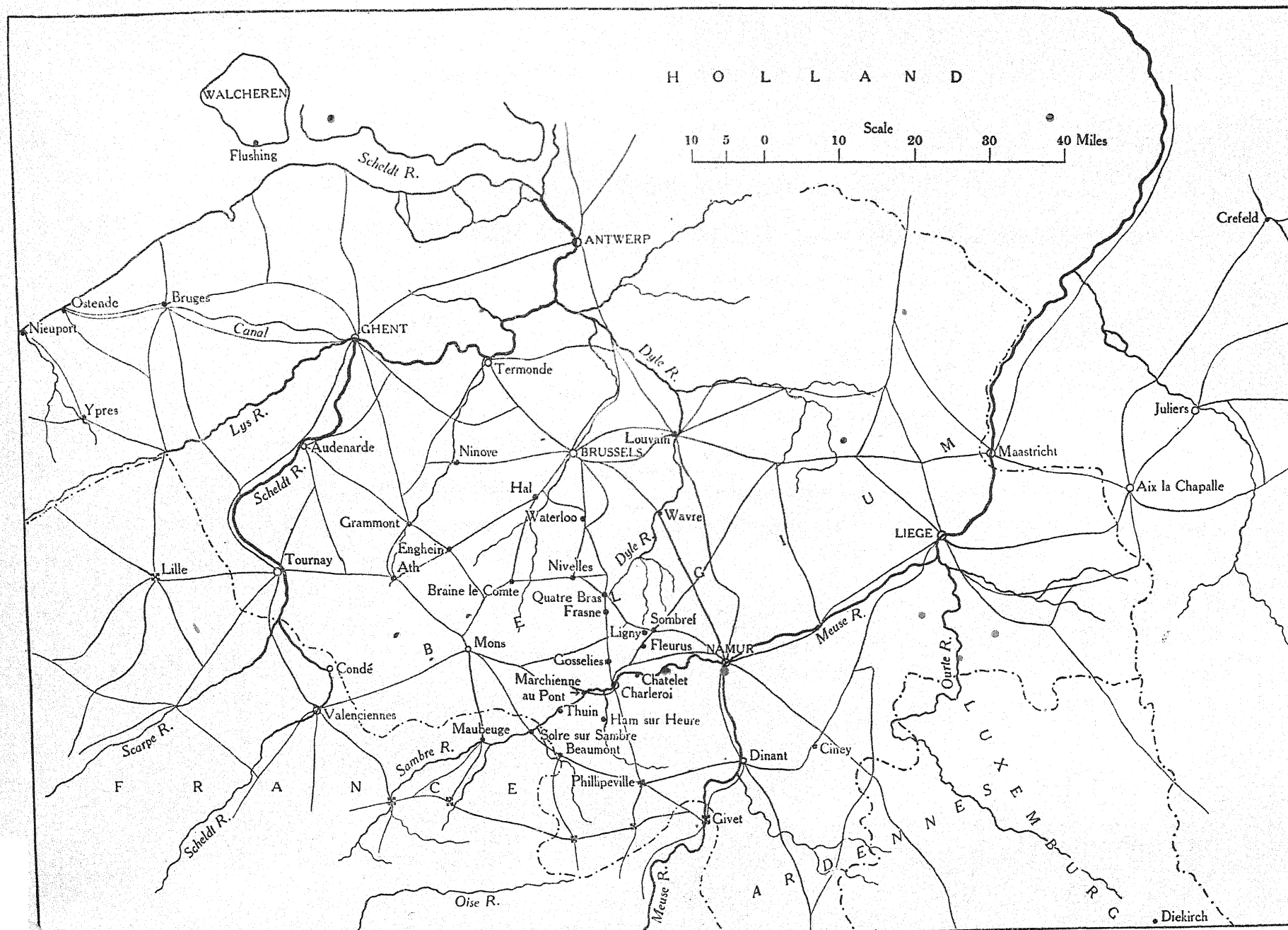
While these operations were taking place, Grouchy had failed to get into close touch with the Prussians, who, after being joined by the 4th Corps, withdrew unmolested to Wavre. Here they were in a position to co-operate with the Anglo-Dutch-Belgians, but in case of defeat their communications with the Rhine via Juliers would be in danger of interruption. From Wavre, on the night of the 17th-18th, Blücher sent a message to Wellington promising the assistance of two or more corps.

On the 18th June Napoleon attacked the Anglo-Dutch-Belgians, but was defeated owing to the tenacity of the allied force and the envelopment of his right by three Prussian corps, while the remaining corps was engaged with Grouchy at Wavre.

Germans
in 1918

The operations of the Germans in the spring and summer of 1918 were in some respects similar to those of Napoleon. The defection of Russia in 1917 had enabled the Germans to concentrate the bulk of their forces in France and Belgium, and this gave them a considerable superiority of trained troops over the French, British, American and Belgian armies which were holding the allied front.

The allies were generally disposed as follows. Near the coast of the Channel at Dunkirk stood the small Belgian army, the British then carried the line to the Oise in the neighbourhood of La Fère; and the French, with some Americans, held the areas onwards to the Swiss frontier, via Reims, Verdun, Pont à Mousson, and thence to the district lying between Belfort and Mülhausen. The Germans stood opposite to the allies, and appear to have massed reserves at Cambrai, St Quentin and Laon. (Map 12 on p. 252.)



The situation of the British and French armies was such that the Germans might hope to achieve their separation and then to beat them in detail. The British were spread out on a wide frontage covering the Channel ports, the security of which was of great importance not only in connection with the maintenance of the army, but also for the anti-submarine campaign. It was vital to the French to protect Paris, the capture of which would involve serious political consequences. Both armies, it might be argued, would, therefore, probably be concerned for their immediate interests and could not readily come to each other's assistance. In addition, neither British nor French had space in which to manoeuvre; measures, therefore, could not be taken to avoid the enemy's blow, and a gain of even sixty miles would bring the Germans either to the coast or to the suburbs of Paris.

The Germans finally resolved to attack the right of the British armies; and towards the end of March a strong force was concentrated against the 3rd, and also the 5th Army which was occupying a front of some forty miles with fourteen divisions¹. The 3rd Army held most of its ground, but the 5th was driven back almost to Amiens, where the Germans were checked by the arrival of reinforcements from both French and British sources. In the end the Germans succeeded only in making an indentation in the allied line, in the area from Arras by Montdidier to Noyon.

On the 10th April they again attacked the British front at Armentières, and though they made some ground no considerable success was achieved. Desultory fighting now ensued for about a month, and, on the 26th May, the Germans made a further effort, this time against the frontage between Reims and Soissons, which was held by a weak force of some eight French and three British divisions. Here, as before, they were at first successful, and the allies were driven back to the line Reims, Chatillon, Château Thierry, Soissons. Again, however, the Germans were unable to exploit their preliminary advantage. Further attacks made in July on both sides of Reims broke down; and finally Marshal Foch, the allied commander-in-chief, who had been husbanding his reserves, and was also able to employ a portion of the American forces

¹ At this juncture a division comprised about 12,000 fighting men.

that had arrived in France, delivered an effective counter-attack on the 18th July between Château Thierry and Soissons, which may be said to have turned the scale of war against the Germans.

Wellington in
1809

Wellington's campaign in the Peninsula in the summer of 1809 illustrates the policy of moving against the wings of the enemy's divided forces; and the necessity not only for rapid and resolute action by the main body if success is to be assured, but for skill and daring on the part of the detachments made to contain the remainder of the enemy's army.

About the middle of April the French forces facing towards Portugal and southern Spain were disposed generally as follows. In or near Oporto were 21,000 men under Soult; near Merida and to the east of Badajos stood Victor with a force of 22,000 which had recently defeated a Spanish army under Cuesta; Sebastiani was south of Madrid near Ciudad Real with 12,000 men; while at and near Madrid were 10,000-12,000 troops, securing the capital and guarding the person of King Joseph: (Map 8 on p. 196.)

Observing how much the French were scattered, Wellington, who had collected about 40,000 British and Portuguese troops north-east of Lisbon, resolved to strike a blow at Soult (p. 12). Since a movement in this direction would, however, expose the base at Lisbon to attack by Victor, he first arranged for the security of his communications by detaching to Abrantes a force of about 12,000 British and Portuguese. These would suffice, it was hoped, to keep away the French, for they had also to deal with the troops under Cuesta, (who had again drawn an army of 23,000 men to Monasterio,) and with 14,000 Spaniards who under Venegas were facing Sebastiani.

On the 6th May Wellington marched with 20,000 men from Coimbra against Oporto, detaching 6000 men under Beresford to proceed towards Lamego and Amarante and sever Soult's communications which ran eastwards up the valley of the Douro. Beresford, as he advanced, was to pick up a force of 2000 Portuguese who under Sir R. Wilson had been operating near Ciudad Rodrigo, and 4000 Portuguese under Silveira who had been harassing the French from the Tamego.

On the 10th May a French detachment of 7000 men under Loison was driven by Beresford from Amarante; and on the 12th Soult, who had 13,000 men round Oporto, was completely surprised by the British and forced to retire in a north-easterly direction.

Closely followed by Wellington, Soult barely escaped with the loss of his guns and baggage, reaching Orense on the 19th May, the British pursuit having ceased the day before.

Wellington now moved his army to Abrantes; and here much time was lost in discussing with Cuesta plans of campaign, though some rest was in any case necessary to enable the troops to refit after their campaign and hard marching when following Soult.

Soult had rallied meanwhile on the Corps of Ney, who was operating against the Spanish forces in Galicia: he had then again equipped his troops, and having beaten the Galicians moved into Old Castile, where he was joined by Mortier with a force from Saragossa. Here orders were received from Napoleon placing Ney and Mortier temporarily under Soult for operations against the British; and for this purpose some 50,000 men were concentrated at the end of June in the vicinity of Salamanca.

While these events were taking place Victor had displayed but little enterprise: after having advanced to Alcantara, where the bridge was destroyed by the British, he had then moved with 25,000 men to Placentia, but by the end of June had fallen back eastwards behind the Alberche. Sebastiani, whose force had been increased to 20,000, also withdrew at the end of June to Madridejos in order both to approach Victor and also to move within supporting distance of Madrid, the garrison of which had been reduced.

Except for the despatch of Beresford with 15,000 Portuguese to watch the movements of Soult, of whose new advance a rumour had come to hand, the British and Portuguese remained inactive until late in June. Cuesta, however, who had received reinforcements which raised his numbers to 38,000, crossed the Tagus at Almaraz.

Wellington now made arrangements with Cuesta for a combined attack against Victor, while Venegas, with a force of 20,000, was to manœuvre so as to occupy the attention of Sebastiani. It was also agreed that Beresford, who had

been joined by 10,000 Spaniards, should be able to secure the allies against enterprises on the part of Soult, with the assistance of Wilson who had 1500 men at Arenas on the Tietar, and of a small Spanish force standing at Baños, on the road from Salamanca to Placentia.

On the 28th June Wellington advanced eastwards with 22,000 men from Abrantes. Owing to difficulties in regard to supplies the movements of the British were so slow that it was the 20th July before the armies of Wellington and Cuesta effected a junction at Oropesa.

Three days later touch was established with the French at Talavera, Victor's advanced troops being driven in. The French thereupon fell back to Bargas, and here Victor was joined on the 25th by King Joseph with 6000 men from Madrid, and also by Sebastiani, who with 17,000 had slipped away from Venegas. The King now resolved to attack Wellington and Cuesta with his combined forces, Soult being directed to co-operate in this enterprise by advancing to Placentia so as to separate the British from Lisbon.

While the French were concentrating Wellington and Cuesta had quarrelled, with the result that the British remained at Talavera although the Spaniards followed Victor as far as Torrijos. On the 26th the King, who with due regard for the security of Madrid could not for long keep his forces together, assumed the offensive, causing Cuesta to retire hastily to Talavera. Here a battle was fought with the allies on the 27th and 28th July, in which the French were defeated.

Victor was now left with 18,000 men to manœuvre against Wellington and Cuesta; Sebastiani hurried away to deal with Venegas, reported to be moving on Madrid; and Joseph returned with the remaining troops to overawe the population of the capital, which had become restive.

No important movements were made by the allies for some days after the battle. On the 1st August, however, news was received of the advance of Soult on Placentia with what was reported to be a small force; and now it was arranged that Cuesta should continue at Talavera to watch the enemy's forces which had been beaten in the battle, while Wellington, with the 18,000 men remaining to him, marched on the 3rd towards Placentia to deal with Soult.

Actually this place had been occupied on the 1st August by Mortier's corps, 19,000 strong, Soult himself was following with 18,000 men, having detached about 5000 to observe Beresford, while Ney, from whose corps a brigade had also been detached against Beresford, brought up the rear with about 12,000.

At this juncture the allies luckily obtained accurate information as to the strength of the force under Soult, and choosing the one avenue of escape still open to them, decided to retire to the south of the Tagus, crossing the river at Arzobispo. This the British accomplished on the 4th, while Cuesta passed over the Tagus on the next day.

The French did not press their advantage. Ney was sent back to Galicia, where the Spanish were again showing activity, and Victor to Toledo for the purpose of operating against Venegas. The force under Soult, consequently, was too weak to enable him to force matters to a crisis, and the French remained on the right bank of the Tagus.

For nearly a month Wellington stood fast on the Mirabete range facing the army under Soult, until Beresford with his Portuguese and some British troops recently landed at Lisbon had occupied Coria, thus directly covering the British base. He then marched to Badajoz and the campaign came to an end.

The situation of the Central Powers with reference to the armies of France, Great Britain, Italy, Serbia and Russia in 1914-17 was not unlike that of Wellington in 1809. It has been pointed out how they took advantage of their interior position to strike blows in succession at Russia, Serbia and Italy (p. 145).

Other instances of attacking enemy in detail

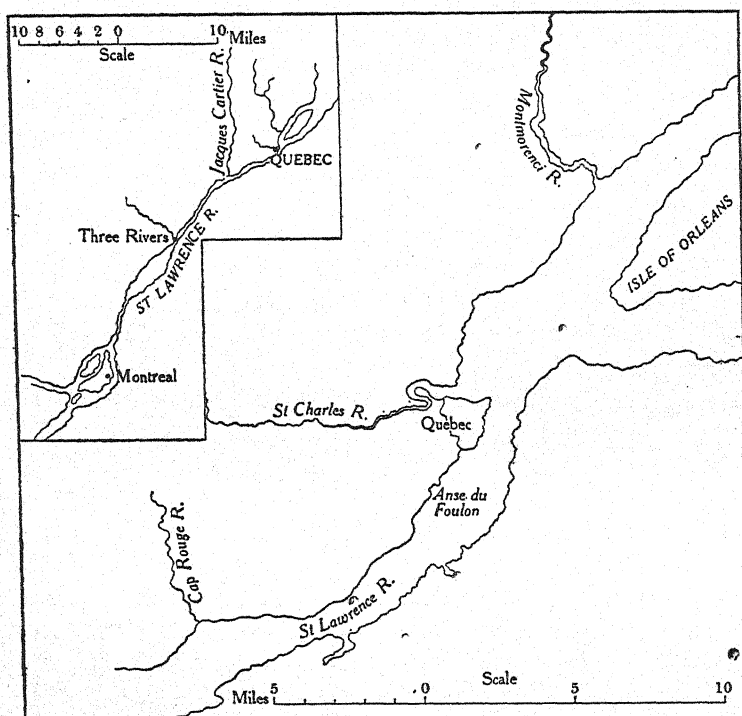
Cromwell's operations against Hamilton in 1648 show how a column which is not well closed up may be defeated in detail by an attack vigorously delivered against its centre (p. 149).

Napoleon also successfully adopted this method against Blücher at Champaubert in 1814, and then beat the heads of the columns of Schwarzenberg's army at Montereau (p. 227).

A commander may sometimes manœuvre with the object of separating the enemy's forces and attacking them piecemeal, and Wolfe's campaign against Quebec in 1759 furnishes an example of this method. Early in June Wolfe sailed up

Quebec in 1759

the St Lawrence with a force of 8500 regulars escorted by a squadron under Admiral Saunders. On arrival opposite Quebec, on the 28th, it was found that Montcalm, the French commander, who had a force of 14,000 men, about 4000 of whom were regulars, 7000 Indians and the remainder militia, was holding a strong position between the Montmorenci and St Charles rivers. Quebec, which was fortified, had also a garrison, and guards were watching the few paths up the



cliffs that form the left bank of the St Lawrence above Quebec. After various attempts to draw out the enemy, an unsuccessful attack was made on the French position at Montmorenci on the 31st July. Having failed in these enterprises Wolfe determined, with the help of the fleet, which had already succeeded in passing certain vessels through the narrows into the water above Quebec, to harass the communications of the French with Three Rivers and Montreal. As a result Montcalm detached 3000 men with some guns westwards, the bulk of whom were placed at the Cap

Rouge river. Wolfe now arranged for a naval bombardment of the French position at Montmorenci on the 12th September, together with preparations as if to land a force to attack it: at the same time a threat of a combined naval and military attack was made at Cap Rouge. The French, therefore, were induced to keep the troops at both places on the alert. Dropping down river from Cap Rouge on the night of the 12th-13th Wolfe then landed a body of 4500 men and two guns, and scaled the cliffs near the Anse du Foulon and midway between the two principal enemy forces. Hastily collecting about 5000 men and three guns Montcalm at once attacked Wolfe, but was defeated and driven into Quebec. No sooner had this been accomplished than the troops from Cap Rouge arrived in rear of the British, but were in turn easily repulsed. Quebec finally surrendered on the 18th, just as a relief force from Montreal had passed the Jacques Cartier river.

POSITIONS ON THE FLANK OF THE ENEMY'S • LINE OF ADVANCE.

An army in certain circumstances may manœuvre in a locality on the flank of the enemy's line of advance, in order to gain time by forcing him to delay his operations or to turn aside from his original line of march. Similarly, the enemy may be delayed by the occupation of a favourable position on the flank of his line of advance; and if he then attacks, makes detachments or manœuvres, battle may result in conditions unfavourable to him.

The locality or position must, however, be one which cannot easily be avoided by the enemy, the maintenance of the troops must present no special difficulties, and the line of retreat must be secure. These conditions are often dependent on the shape of the frontier, the trend of a range of mountains, or the course of a river; but they also exist when an army is fighting in its own country. The force that is employed should be of such strength that it cannot without danger be disregarded. If in position the troops also must retain the power to issue out and attack the enemy should he attempt to pass by the position with his whole army, or detach a force to watch it and move forward with the remainder. Otherwise the force holding the position may be neutralized by inferior numbers. (See also p. 190.)

Position
on flank
exempli-
fied

The expedient of taking up a position on the flank of the enemy's line of advance was successfully employed by Lambert, in 1648, when by occupying Appleby Castle and Stainmore Dale he was able to delay the advance of Hamilton's army into England (p. 149) ; it was also used by Wellington when he remained on the Mirabete range in 1809 to prevent the French from gaining Lisbon (p. 183).

During the campaign in Gascony, in 1814, Soult, the French commander, instead of retiring before the advance of Wellington in a north-easterly direction from Bayonne, fell back towards Toulouse, obliging the Anglo-Portuguese and Spaniards to follow him. (Map 10 on p. 226.) They were thus prevented from penetrating into the centre of France, where connection might have been established with the Russians, Austrians, and Germans (who had advanced into Champagne), and were also drawn away from the British base on the sea coast. At the same time their left and rear was exposed to attack from any forces which might be collected by the French in the area to the north of the Garonne.

The Prussians, however, unsuccessfully took up a flanking position in the Jena campaign of 1806 (p. 159).

The position behind the Saale—according to Clausewitz—was an ideal flank position. On the one hand it seemed hardly possible that the French, whose communications would be confined to the narrow space between the Saale and Bohemia, would advance northwards and neglect the Prussian army massed behind the river. (Map 3 on p. 124.) On the other hand, the localities held by the Prussians would be tactically advantageous should Napoleon move against them, for the Saale runs through a deep rift which is passable only in a few places, and these are some distance apart.

The Prussians, therefore, might hope to beat the French in detail while engaged in crossing the Saale, should they attempt to do so either in one or in several localities. If the French did succeed in passing the river, they would be obliged to fight in a restricted area with a defile behind them. Should the French ignore the Prussians and push northwards, the Prussians could either pass over the Saale behind the French and attack their flank and rear, at the same time cutting their communications ; or, using the

river as a screen and protection, they could head off the enemy by marching rapidly on Koesen and Merseburg.

As has been shown, however, Napoleon's vigorous operations proved more effective than the theoretical advantages enjoyed by the Prussians.

In 1866, after their defeat at Königgrätz the Austrians retired on Olmütz, a fortress flanking the Prussian line of advance on Vienna. Von Moltke, however, only detached the 2nd army to contain the beaten force, while the bulk of the Prussian troops pushed forward towards the Austrian capital (p. 133).

STRATEGICAL OPERATIONS SHOULD BE SIMPLE.

It has already been pointed out that a plan of campaign should be simple, and it is evident that the possibility of error will be increased by complication, for success will then be dependent on the exact performance of several different operations whose very number will tend to produce failure. The examples that have been given of strategical operations show, further, that those that are the least intricate are most likely to succeed.

"Simplicity"—said Napoleon—"is the characteristic of all sound manœuvres in war"; and nothing could be more simple than his plan for the Jena campaign of 1806, which was to concentrate the army on its right in order to insure that nearly 200,000 men should be present on the same battle-field. The detachment of Davoust, Bernadotte, and Murat, towards Naumburg, however, introduced an element of complication and consequently of danger (p. 162). His plan for the Waterloo campaign was also simple, but its failure was probably in part due to errors in executing what from force of circumstances became a complicated operation (p. 177).

Moore's plan of operations in 1808 against the communications of Napoleon was quite straightforward, while Napoleon's counter-stroke cannot be surpassed either for simplicity or effectiveness (p. 156).

Cromwell's operations in 1648 against Hamilton were perfectly simple; but the unavoidable complication of his plan for passing the Forth in 1651 gave an opening to Charles for the delivery of what might, in more favourable circumstances, have been an effective stroke (p. 165).

The campaign of 1809 in Portugal and Spain shows how disadvantageous were involved plans to both sides. At the beginning of the campaign Wellington's project for operating against Soult was both simple and effectual; but later the allies were unable to secure simultaneous action between the forces of Wellington, Cuesta, and Venegas. Similarly, the French could not co-operate successfully against the armies of Wellington and Cuesta (p. 180).

The German plan of campaign for the invasion of France in 1914 was perhaps not sufficiently simple and straightforward for so large an army (p. 141). The allied plan of operations for 1917, which necessitated a simultaneous offensive by widely separated groups of armies, also did not succeed (p. 142).

Simplicity, although of great importance, is not, however, attainable or necessary for success in all circumstances. This is shown by the operations of the Ulm campaign of 1805, when Napoleon, who possessed great numerical superiority over the Austrians, and was opposed by a commander of whose ability he had formed a low opinion, neglected and was justified in neglecting his own maxim (p. 137).

CONCLUSIONS.

From the examples which have been quoted of strategical movements it will have been evident that success can never be attained by merely following a strategical formula. There is an effective answer to every manœuvre, and for each example of a successful strategical operation an instance may be cited of its failure.

Circumstances, such as the characters of the commanders, the relative geographical positions, strength and efficiency of the two forces; their mobility, organization, maintenance, and *moral*, and the objects to be attained, largely govern all strategical operations. In estimating whether a plan is likely to result in the achievement of the object due regard must therefore be paid to the conditions and circumstances in which the movements are to be carried out.

Plans for the envelopment of the enemy's army or for manœuvres against its communications seem, for instance, most likely to meet with success when a commander can count on superiority over or at least equality with the enemy

so far as numbers, mobility, *moral* or armament are concerned; or when the geographical situation is favourable. But a general whose forces are inferior to those of the enemy will probably endeavour to manoeuvre for an opportunity of attacking and defeating him in detail.

A plan, however, should always be so framed that if successful the greatest advantages will be gained, irrespective of the consequences of possible failure. Each blow, therefore, should be aimed and delivered so that the enemy will be forced to parry it and to conform to the movements of the attacker. If this is the case, the enemy's situation will usually be disadvantageous.

Whatever the operation it is evident that success or failure will depend largely on the skill and completeness with which preparations have been made to insure that all the requirements of the army may be supplied; on timely action and the element of surprise; and on the vigour, daring and rapidity with which a movement is initiated and carried out, or met. Further, to have secured superiority in these factors, will often result in the establishment of the mental ascendancy over the commander of the enemy's forces, which is the condition most favourable for victory.

Hesitation and delay will always be fatal to success, but it is the simple operations that are most likely to be rewarded with victory. As stated by Napoleon, victory can rarely result from a plan that has not been both well conceived and is ably executed.

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CHAPTER VI

GEOGRAPHICAL FACTORS.

THE foreign policy of an empire is necessarily influenced by its geographical situation; and it is equally evident that in war geographical factors may exercise a constant and most important effect on the dispositions and objectives of the naval, military and aerial forces. (Maps 1 and 2.)

Security
from
invasion

The position of the British Isles, for instance, with reference to the continent of Europe is in many respects advantageous. Invasion, at any rate on a large scale, will be most difficult while the British maintain control of the maritime and aerial communications with the British Isles. This should both free the nation from anxiety, and insure liberty of action for its armies, which should not be tied down to the defence of the United Kingdom. So long as her sea and air power is maintained, Great Britain, therefore, will be a most formidable antagonist to any continental power, for she can strike without fear of direct retaliation.

So long as Great Britain maintains her naval superiority, the geographical position of India, Burmah and Egypt is also favourable for defence. The land frontier of India is marked by the most formidable mountain ranges in the world, the passes over which are both few and difficult. The territory beyond the mountains is for the most part either arid and sterile, or mountainous and undeveloped, and this renders India difficult of approach. The frontier districts of Burmah also consist of great ranges of mountains; while in the case of Egypt both eastern and western frontiers are bordered mainly by desert, with but few routes on which water is sufficiently plentiful to support large hostile forces.

Flanking
position

Ireland, which lies west of Great Britain, is so placed that, if held by a hostile nation, British trading ships sailing westwards and south-westwards would be liable to attack for many days after leaving and when returning to British ports. The British would also be compelled to take far more extensive precautions for the security of their western coast line. Hence, in the wars between the French and English, the former

on more than one occasion endeavoured to stir up rebellion in and gain possession of Ireland.

The British Isles, moreover, are on the maritime and to some extent also on the aerial lines of communication with the west and north-west of all the north-eastern nations of Europe. This, as was shown in the struggle of 1914-18, should enable Great Britain, if at war with these nations, and possessing superiority at sea and in air, to bring heavy economic pressure on them through the dislocation of their overseas trade; for all merchant vessels after leaving and before reaching their continental ports must run the gauntlet of the British naval and air forces, and all air vessels must go far south, and therefore use longer routes, to avoid our air forces.

India and the Straits Settlements are on the flank of the trade-route from the Red Sea to China and Japan, and Jamaica and the West Indian islands are on or near the lines of approach to the isthmus of Panama and its canal from the east. In time of war, then, a power possessing superior naval and aerial strength and holding India, the Straits Settlements, or Jamaica, should be able to render enemy commerce precarious in the seas and air near these places. Likewise the possession of Cape Colony would render enemy trade from Europe round Africa almost impracticable.

The German colonies of Kiao-Chau, the Cameroons, German East Africa, Samoa, the Carolines and New Guinea were potential bases from which to harass British and allied trade in the war of 1914-18, and were therefore attacked and conquered by the allies as soon as the necessary forces could be made available.

Owing to its geographical position Portugal has more than once proved of considerable importance in time of war. In the war of the Spanish Succession, for instance, Portugal was at first benevolently neutral towards the British and their allies, and British warships were able to use Lisbon as a base from which to draw supplies, and where minor repairs could be effected. In 1704, however, the French and Spanish intimated that Portugal must join their party, or submit to invasion. The Portuguese thereupon appealed to the allies, who decided to detach 12,000 men to their assistance from the main theatres of war in Germany and the Netherlands.

In the war in the Peninsula the relative position of France, Spain and Portugal enabled Wellington, who was operating from the latter, continually to menace the communications of the French from Madrid to Bayonne. This influenced the distribution of the French forces, and owing to the necessity of containing the British, and of securing their communications against the Spanish partisans, the French were unable to spare sufficient troops to complete the conquest of Spain.

Central
position

Lying midway between the continents of Asia and Africa, and the seas that wash the shores of Europe, Asia and Africa, the position of Egypt is strategically important, for the routes between three continents can be controlled by any strong power holding the country. The occupation of Egypt, therefore, by a nation hostile to Great Britain would be disadvantageous to the British, whose most direct line of communication with the Asiatic and Australasian portions of the Empire would be in danger of interruption. Further, the presence of such a power in Egypt would oblige the British to devote large naval, military and aerial forces to the protection of India.

This last consideration is said to have prompted Napoleon's expedition to Egypt in 1798, and the British expedition against the French army of occupation; and similar reasons probably induced the Germans to instigate the Turkish attempts on Egypt in 1915 and 1916. Much additional importance has been given to Egypt since the cutting of the Suez Canal, which has converted an isthmus into one of the busiest of the world's maritime highways.

The central position which they enjoyed in the war of 1914-18 with reference to the Western group of Powers and their associates operated greatly to the advantage of the Germanic Powers and Turkey. As has been pointed out, the Germans were able rapidly to transfer troops from one zone of operations to another where their presence would be more effective, and in this manner to gain a considerable measure of success (p. 145).

Geo-
graphical
objective

The Seven Years' War supplies, as has been shown, an instance where a geographical locality was made the principal objective. Prior to the declaration of war the French had pushed southwards from Canada and established a series of

posts in the valleys of the Ohio and Mississippi which, if retained by them, would have shut off the British colonies in North America from expansion westwards. The elder Pitt, therefore, resolved to make the conquest of Canada Great Britain's main objective, so as to break down the power of the French on the North American continent. At this period the Kings of England were also Electors of Hanover. England consequently was obliged to assist in the protection of this country also, and to maintain a force in Germany against the attempts of the French to win back, through the capture of Hanover, the possessions lost to British naval and military power in America and India.

In our most recent war the geographical fact that the communications used by the Germanic Powers from Turkey in Europe to Asiatic Turkey could readily be approached from the Aegean and the Sea of Marmora was one of the reasons that induced the British to attempt the capture of Gallipoli and the opening of the Dardanelles in 1915. A contributory reason was also the geographical isolation of Russia from the Western Powers, who were much handicapped by the fact that they could communicate with the Russians only by Archangel, a port icebound for many months in each year; or through the Murman coast, to which there were few roads and no railways; or across the vast areas of Siberia.

Syria and Palestine contain the only land routes by which Egypt can be attacked in force; and their possession by an aggressive power would, therefore, constitute a serious menace to the security of Egypt. The rulers of Egypt have, consequently, always resisted attempts by other powers to gain Palestine, and, conversely, the conquest of the maritime plain of Palestine has been the usual preliminary to an attempt by land against Egypt.

THE SHAPE OF THE FRONTIER.

The shape of the land frontiers of the belligerents, or the relative position of the areas occupied by their troops, may also be of frequent importance in war. If the countries are separated by the sea, the shape of the coast-line may exercise just as great an influence on their strategical plans and dispositions.

The importance of these factors is, however, contingent on the possession of the initiative, on the presence of suitable communications from or to the frontier or area, and on the power to use and control them. No geographical advantage can counterbalance that of the initiative, and obviously a geographical advantage cannot be exploited without communications. On the other hand, the advantages of the initiative may be increased by a situation which is favourable in a geographical sense, and as regards roads and railways, or ports and harbours.

STRAIGHT FRONTIER.

When the frontier, or a line dividing two armies, is approximately straight, as is the frontier between France and Spain; as was formerly that between England and Scotland; and as, in 1914, was the French frontier towards Germany and Belgium, and the frontier between Palestine and Egypt; there is no advantage to either side so far as the shape can influence the course of a campaign. This will, however, be affected by physical factors, such as the existence of mountains, rivers, canals, lakes, marshes, areas of enclosed ground or deserts; by the presence or absence of roads and railways, and the passes, bridges, causeways, or other restricted areas traversed by them; and by the position of the fortresses or fortifications.

Physical
features
exempli-
fied

The Pyrenees, for example, form a barrier between France and Spain which is practicable for military operations only at the two extremities, and in the areas near the sea coast, where there are fortresses on both sides of the frontier. (Map 2.) The Cheviot Hills exercise a similar influence on the communications between England and Scotland; and formerly Carlisle and Berwick, standing on the main routes over the Hills, were fortified. The groups of French fortresses that existed in 1914 opposite to the German territories of Alsace and Lorraine were probably one of the factors that induced the Germans to violate the neutrality of Belgium. The desert frontier of Egypt prevented the Turks from attempting invasion in great force in 1915.

The strategical situation will also be affected by such geographical factors as the position of the bulk of national territory with reference to the portion of the frontier that is under menace of attack. For instance, in 1914, the greater

part of French territory lay south of the Franco-German frontier, and larger forces, relatively to its extent, were therefore available for its defence than would have been the case had the whole country been coterminous with that of the enemy. On the other hand, the Germans might hope, if successful, to drive a wedge between southern and northern France.

SALIENT FRONTIER.

When a frontier or area held by an army is salient, that is, projects forward so that hostile territory or areas controlled by the enemy lie on both sides of it, the situation is more complex. In these circumstances, and provided that he has the initiative and that roads, railways, and issues are available and conveniently situated for the use of the army, the commander operating from the salient is in a position to inflict surprise; since the enemy cannot tell whether the principal advance is to be made from the apex or from the sides of the salient. Unless, therefore, his armies are of sufficient strength to secure the whole frontier, the enemy must either uncover territory and place the whole of his forces at the apex or on one side; or must divide his forces, allow the troops in the salient the use of interior lines, and risk defeat in detail.

Again, if an army operating from a salient can successfully assume the offensive, it will, immediately on advancing, strike far into the enemy's country, and the resources of all territory behind it will then probably cease to be available for the enemy. Besides, the proportion of the line of communication traversing hostile territory will be small, and relatively few troops should therefore be required for its protection. When thrown on the defensive the army which is standing in a salient will generally enjoy the advantage of interior lines and may be able to concentrate to meet the enemy's attacks and defeat them in succession.

On the other hand, unless the salient is wide there will be but little space for manœuvre, and few roads or railways may be available for advance in any given direction. Moreover, if the enemy's forces are sufficiently strong to justify their commander in undertaking a concentric movement from the sides of the salient, the troops within it will be liable

to envelopment; and an advance by the enemy even from one side of the salient will menace the communications of all forces either standing in it or posted along the other side.

Opera-
tions from
a salient
exempli-
fied

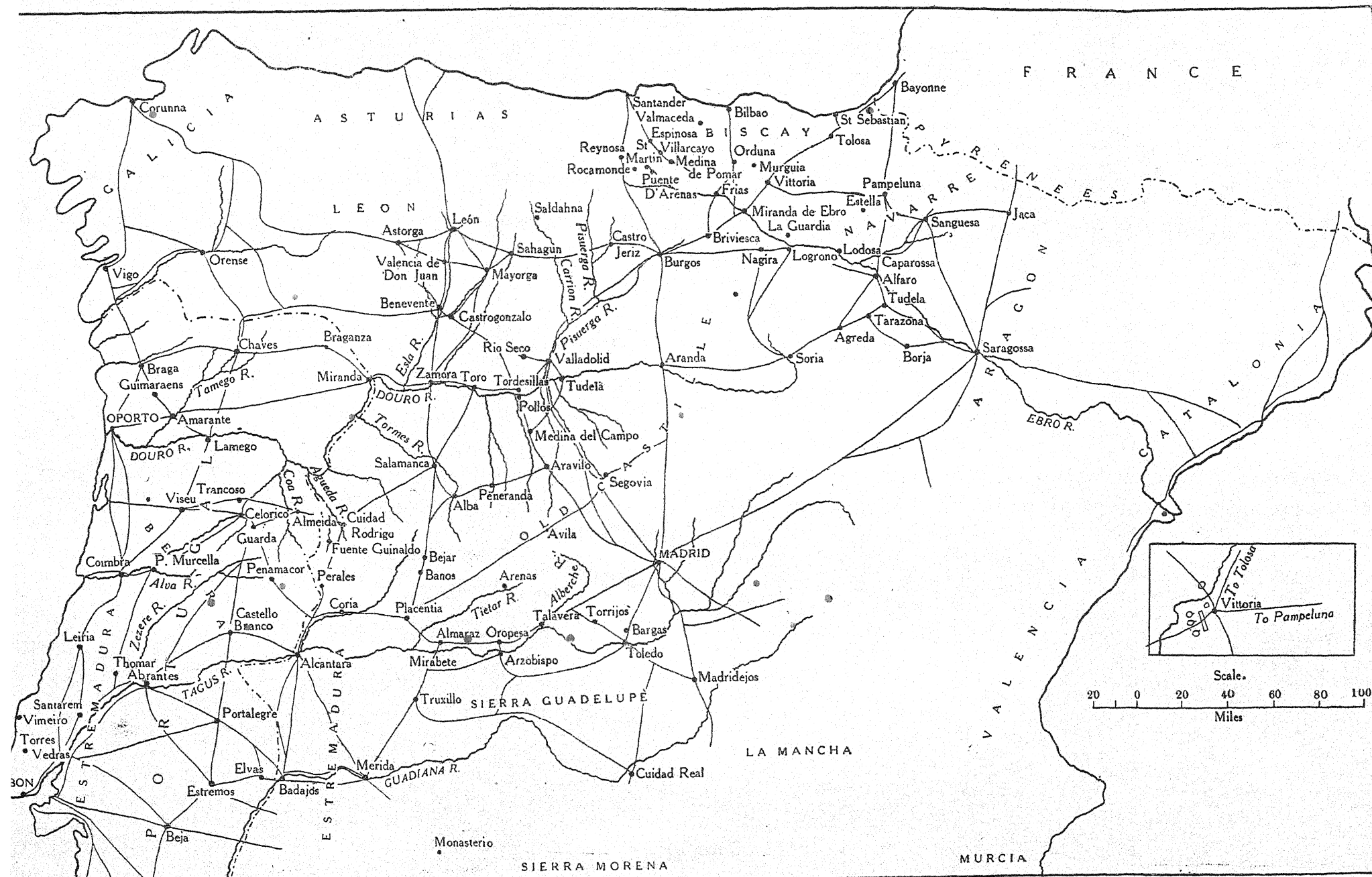
The advantages of operating from a salient when an army is able to seize the initiative are illustrated by the dispositions and operations of the Allies and the French in the Peninsula in 1809 (p. 180). The French were then standing on a frontage from Oporto to Badajoz, and Wellington struck first at one, then at the other extremity of the line.

Napoleon
in 1808

At the commencement of 1808 the position of the French armies prior to Napoleon's campaign in Spain was also salient with reference to the forces of the Spaniards; and the Emperor took advantage of this circumstance to attack, surprise, and beat them in detail. (Map 8.)

About the middle of October the relative positions of the French and Spanish armies were as follows. The French right, under Bessières, 18,500 men, was on the line Murguía—Miranda de Ebro, facing 30,000 Galicians, who under Blake were between Villarcayo and Valmaceda. These troops were subsequently reinforced by 8000 Spaniards under Romana. The French centre, 9000 men, commanded by Ney, was at La Guardia, opposed by 35,000 men extended from Tudela to Logrono, under the orders of Castanos. The left of the French, about 21,000 men, under Moncey, stood at Estella and Sanguesa, facing 20,000 Spaniards who were commanded by Palafox and were holding the area between Sanguesa and Saragossa. A French reserve of about 8000 was near Vittoria, and large reinforcements were on their way from France; while behind the Spanish first line were some 60,000 men in various parts of Spain, including 10,000 men under Belvedere, who subsequently moved to Burgos.

Napoleon reached Bayonne on the 3rd November, and having organized his army into corps at once decided on a plan of operations. Observing the separation of Blake's force from the rest of the Spanish armies, the Emperor resolved to strike hard in the direction of Burgos while holding fast the enemy's wings. These were then to be attacked in front and enveloped by forces wheeled to right and left from the centre. The success of this plan was prejudiced owing to a





premature advance on the 31st October by the 4th Corps against Blake's army, which was defeated. Leaving the 1st and 4th Corps, in all some 35,000 men, to pursue Blake, and the 3rd Corps, which with other troops had been raised to 34,000, to watch Castanos and Palafox, the Emperor, however, moved with the 2nd and 6th Corps, the Guard and a mass of cavalry, totalling 70,000 men, on Burgos, scattering the weak detachment under Belvedere on the 10th November. Troops were now sent from the centre against Blake whose army, though not surrounded, was broken up. Castanos and Palafox were also attacked and beaten on the 23rd November by the 3rd Corps; but though severely handled were able to escape from the enveloping movement of a force despatched by Napoleon from Burgos.

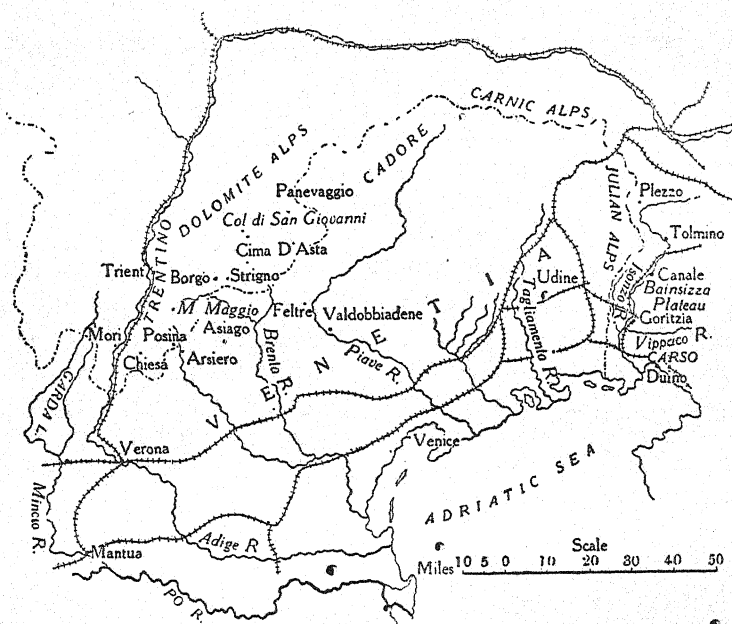
Towards the end of May, 1918, the previous successes of the Germans had forced a considerable salient in the Anglo-French line of battle, the ends of which were roughly at Reims and Arras and the apex at Montdidier. (Map 12 on p. 252.) Taking advantage of this the Germans made preparations for an attack in various localities along the front, and reserves were massed at Cambrai, St Quentin and Laon, points whence railroads radiated to the battle areas and also connected by lateral lines. After exerting considerable pressure towards Armentières and Ypres, as if intending to force their way to Calais, the Germans, on 27th May, suddenly concentrated about thirty divisions against the frontage between Reims and Vailly which was held at first by eleven French and British divisions. By continual reinforcement (until the numbers employed amounted to about fifty divisions) the Germans were able, by the 31st, to press forward the centre of the attack to the Marne at Château Thierry. They then attempted to advance southwards from Noyon and westwards in the area between the Marne and Aisne, but were checked by French and American forces.

The campaign in Italy in 1916 illustrates the advantages enjoyed by an army operating first on the defensive, and then attacking from a salient. In the spring of 1916 the positions held by the main forces of the Italians round the province of Venetia formed a large salient, extending roughly from the coast of the Adriatic near the mouth of the Isonzo along the Julian, Carnic and Dolomite Alps as far as Lake

Germans
in 1918

Italy in
1916

Garda; and as a result of previous fighting the principal passes leading from the Venetian plain over the first ranges of mountains were in the hands of the Italians. Observing that the Italians had concentrated large forces as if to attack Goritzia where the ground was less difficult for a sustained offensive, the Austrians, who had been holding their front with about 1,000,000 men, decided, as soon as the weather would permit, to bring some 400,000 men to the Trentino for a counter-stroke against the Italian railway communica-



tions at Verona and Mantua. The Austrians were able to anticipate the offensive of the Italians, and attacking on the 14th May had forced the Italians back by the end of the month to a line from Cima D'Asta by Strigno to Asiago, and thence along the foothills bordering on the Venetian plain to the south of Posina, Chiesa and Mori to Lake Garda. Alarmed for his communications, Cadorna, the Italian commander, decided to move a force of about 500,000 men from their area of concentration between the Tagliamento and Isonzo against the Austrians, and with the arrival of the advanced troops the Austrians were checked on the 3rd June. On the 16th the Italians began to attack

and by the end of the month the enemy had been driven to the general line, Panevaggio—Col. di San Giovanni—Monte Maggio—Chiesa. Having secured their communications the Italians now moved troops and guns back to the Isonzo front, and on the 1st August commenced an offensive which gave them possession of Goritzia and the western part of the Carso.

The disadvantages of a position in a salient, when the enemy possesses the initiative and superiority of force, and acts with vigour, are shown by the opening of the campaign in Natal in 1899, by the defeat of the Serbians in 1915, and by the second battle of the Marne in 1918.

At the commencement of the operations in Natal there were about 4000 British at Dundee and Glencoe, and 8000 at Ladysmith under Sir G. White. The Boers on the other hand had concentrated about 11,500 Transvaalers at Sand-spruit and Wakkerstrom under Joubert, 3000 Transvaalers were under Meyer at Utrecht and Vryheid, while 10,000 Freestaters held Botha's, Van Reenen's, and other passes over the Drakensberg Mountains. (Map on p. 200.)

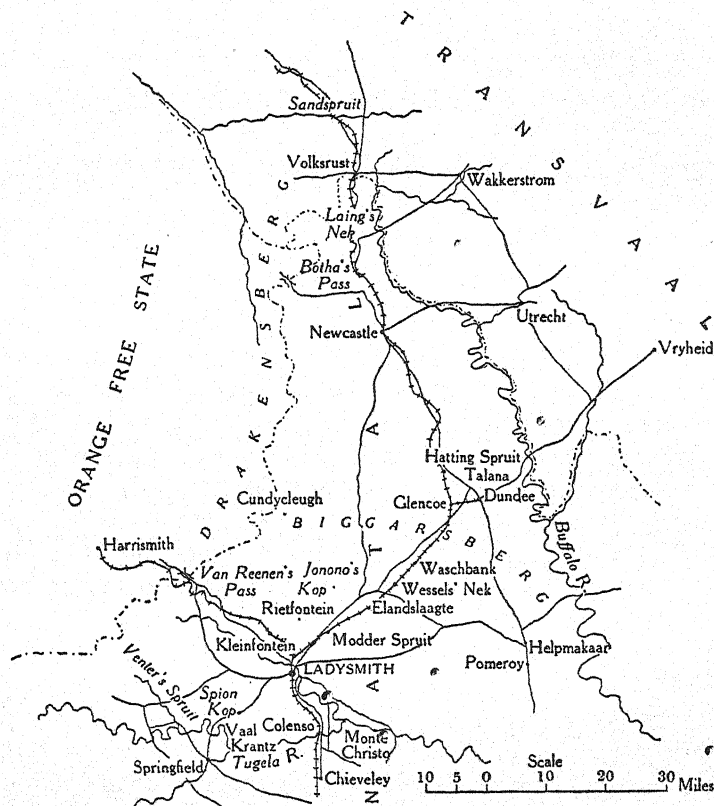
On the 12th October the Boers opened the campaign, Joubert occupying Laing's Nek on the 13th. It was now decided that the main body of Joubert's force should march on Dundee, while a detachment of 1000 under Koch was to cut the railway between that place and Ladysmith, and Meyer was also to advance on Dundee from the east.

The movements of these columns were not accurately timed: Meyer, in consequence, who reached the neighbourhood of Dundee on the 19th, was attacked and beaten at Talana Hill. On the 21st Koch also was defeated at Elands-laagte, while the force at Dundee skirmished with some Boers, apparently the advanced guard of Joubert's force.

On the 22nd, in order to avoid complete envelopment, the British fell back from Dundee towards Ladysmith. Meanwhile the Freestaters had advanced and, on the 23rd, occupied the heights near Rietfontein, thus menacing the line of retreat from Dundee. They were consequently attacked on the 24th by a force from Ladysmith, with the object of covering the movements of the troops from Dundee, who reached Ladysmith on the 26th.

During the interval the Boers had closed in on the British,

Erasmus, commanding the advanced guard of Joubert's force, having obtained touch with the Freestaters on the 26th, while Meyer moved towards Modder Spruit. Two days later the Freestaters were near Kleinfontein, Joubert was north of Ladysmith and Meyer at Modder Spruit. On the 30th the

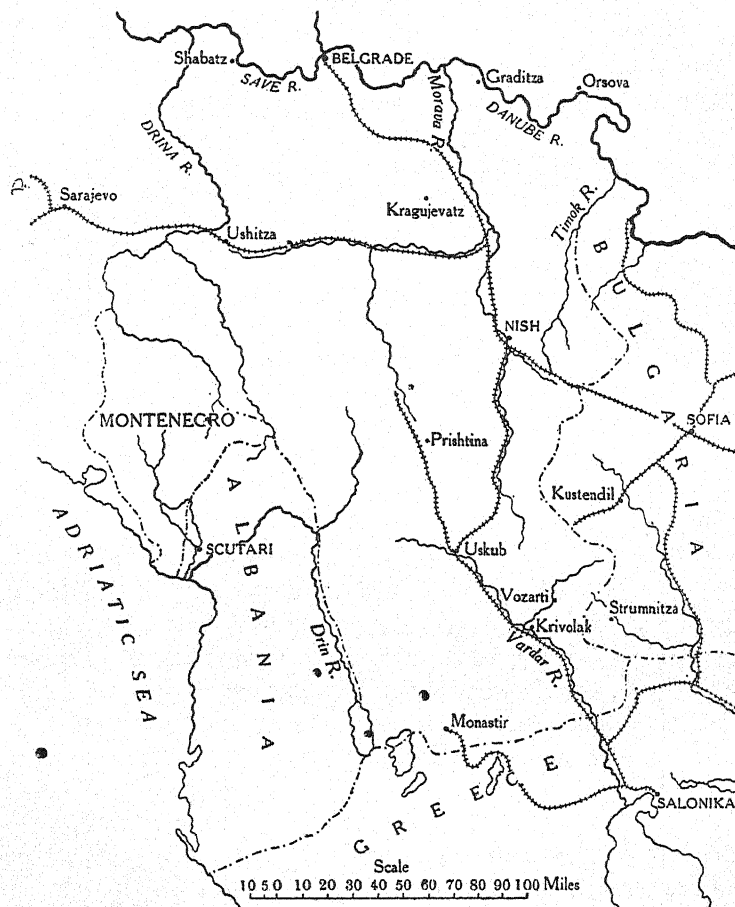


British engaged but failed to drive off the enemy, and from that date were practically invested in Ladysmith.

Serbian
in 1915

The defeat of the Serbians in 1915 also illustrates the drawbacks of the position in a salient. In the autumn of this year the Serbian armies, numbering in all about 200,000, which had twice beaten the Austrians, were disposed as follows: the 2nd Army was covering Nish against an attack from the east, the 3rd was facing north astride the valley of the Morava; the line was carried on by the 1st, which held the angle made by the Save and Drina, and a detachment

stood at Ushitza. Of their opponents an Austrian force was in the valley of the Drina, an Austro-German army of 200,000 extended from the junction of the Drina and Save to Orsova; the Bulgarian forces, 250,000 strong, lay with their right along the Timok and thence as far south as to cover Sofia,



and the left stretched from Kustendil to Strumnitza. The only other troops in the theatre of operations were 13,000 British and French who had recently landed at Salonika to assist the Serbians; and Albanian irregulars who would probably take sides against them. The Serbian communications were not well developed; and although the frontiers were protected by large rivers on the north-west and north,

and mountains on the east which would delay the enemy, the Serbians did not possess the means of concentrating so quickly against either of the hostile armies as to be able to take advantage of this circumstance and of their central position.

After a period of cannonade and minor operations Austro-German troops crossed the Danube and Save on the 7th October; Belgrade fell on the 9th, and by the 11th the bulk of the Austro-German army was established on the southern bank of the Danube on the general line Shabatz—Graditza. On the next day the offensive was commenced by the Bulgarian right, on the 17th a general attack was made along the whole eastern front, Uskub was captured on the 22nd and the door thus practically closed against help from Salonika. Meanwhile the Austro-Germans had also gained ground, and by the 30th were in possession of Kragujevat. Nish fell to the Bulgarians on the 6th November, and as the small Anglo-French force had failed to advance beyond the line Vozarti—Krivolak the resistance of the Serbians practically collapsed. A large portion of the army, however, escaped envelopment and eventually found safety on the coast of the Adriatic, where touch was established with British sea power.

Germans
in 1918

The Germans also experienced the disadvantages of a salient position in 1918. (Map 12 on p. 252.) It has been explained above (p. 197) that at the conclusion of their attack in May the Germans had been able to drive forward into the French lines, and to carry their front to a salient extending from the neighbourhood of Reims almost to Epernay, then to Château Thierry, and finally northwards to Vic on the Aisne. Within this area the main communications were those from Château Thierry to Soissons. The plan for the German offensive of the 15th July seems to have contemplated a break through the French front east and west of Reims which would draw French reserves to this point, and then an attack on the British in Flanders. The attacks at Reims and along the Marne were not successful, and on the 18th July the Allies made a sudden counter-attack on the frontage between the Ourcq and Aisne which was subsequently extended to the Marne. This attack soon compromised the communications from Château Thierry to Soissons, and the Germans were driven back first to the Vesle and then across the Aisne.

RE-ENTRANT FRONTIER.

When a frontier, a coast-line controlled by the fleet, or an area held by the army, partially encloses the enemy's territory it is said to be re-entrant.

Within the limitations imposed by the possession or loss of the initiative, and the presence or absence of communications, passes, fortresses, etc., a re-entrant frontier, or area, will favour operations with the object of enveloping the enemy's army; or will afford the choice of several lines of operation, and also facilitate change from one line to another, as is shown by Napoleon's arrangements in 1806 (p. 123).

Further, if the enemy's armies are standing within but are not based on the territory enclosed by the re-entrant, their lines of communication may be menaced and interrupted without reciprocal danger to those of the army operating from the re-entrant; provided that the direction taken by the roads and railways is favourable for this purpose.

When an army, therefore, can advance from one side of a re-entrant against the communications of a force standing within the re-entrant, the latter will be obliged either to withdraw out of danger, or to fight in a position parallel to its communications, or may even be separated from its base.

The investment of the British in Ladysmith in 1899 is an instance where envelopment was facilitated by the shape of the frontier (p. 199). The Marengo campaign of 1800, between the French and Austrians, and the Italian campaign of 1917 supply examples of a successful advance from one side of a re-entrant.

About the middle of May 1800 the Austrian armies in Italy were placed generally as follows. (Map 9 on p. 224.) At the foot of the St Gothard and Simplon passes were 10,000 Austrians under Wukassowitch, 3000 were at the Great St Bernard, and 5000 at the Mont Cenis; 25,000 men were besieging Masséna, who was holding Genoa with 9000 French; some 7000 were lying between Genoa and the Var, 20,000 were under Elnitz on the Var, and 20,000 were on duty in the various fortresses in Lombardy. Instead of adopting an ordinary plan (such as direct advance from the Var for the relief of Genoa) Napoleon had resolved to make a daring

Influence
of re-
entrant
front
exempli-
fied

Marengo
in 1800

stroke at the Austrian communications which led to the Mincio. Leaving Suchet with 13,000 French troops on the Var, and sending 5000 under Thureau over the Mont Cenis, he himself marched with 35,000 men across the Alps by the Great St Bernard, while 16,000 under Moncey were moved through Switzerland towards the St Gothard.

The Austrian commander, Melas, did not become aware until the end of May that a large force of French was advancing from Switzerland against his communications, but on receipt of this news he began at once to concentrate his army. Elnitz, however, lost about half his force during the retreat from the Var, and the French were able to drive Wukassowitch eastwards, so that in spite of the surrender of Genoa on the 4th June, Melas was able to collect only some 30,000 men at Alessandria to oppose Napoleon.

Meanwhile Napoleon, having successfully advanced into the valley of the Po, had so disposed his forces as to close all the lines of retreat open to the Austrian army under Melas, by securing the passages over the Po and the Ticino, and the defile of Stradella. At the same time garrisons had been placed in Milan, through which the French had established a line of communication to the St Gothard, and in the various fortresses which had been captured; and troops had been detached to watch and blockade the strong places still held by the Austrians. These measures having been completed, Napoleon hurried westwards with the remainder of his army, some 30,000 men, against Melas, who was decisively beaten on the 14th June at Marengo, and cut off from Austria.

The result of this battle was that the Austrians agreed to evacuate the whole of the territory west of the Mincio.

Austrians
in 1917

In the autumn of 1917 the Austrians occupied a re-entrant enclosing the line held by the Italians round the province of Venetia; but owing to the rugged and mountainous nature of the northern side of the re-entrant they were unable to take full advantage of this situation to attack the communications of the Italians. (Map on p. 198.)

The Italian armies were standing generally as follows: the 3rd Army was on the right of the line from Duino to the Vippaco, the 2nd Army, consisting of eight corps, prolonged it as far as Plezzo; the front then continued gener-

ally along the Austro-Italian border as far as Chiesa, and thence to Lake Garda, the Carnic section being held by a detachment, the Cadore section by the 4th Army, to the west of which was the 1st Army.

The result of the Italian offensive along the Isonzo earlier in the year had been to leave the Italians on the mountains a few miles to the east of the river between Plezzo and Tolmino, and also between Canale and Goritzia; but the Austrians still retained the right bank at Tolmino. The Austrians decided to take advantage of this situation, and while holding the Italians elsewhere to bring a strong Austro-German force, which could be maintained by using the railways leading to Tolmino and Goritzia, against the Italian 2nd and 3rd Armies. Accordingly no fewer than thirty-five Austro-German divisions, out of a total of about fifty that were serving on the Italian front, were massed in the 5th and 14th Army areas between Plezzo and the coast of the Adriatic.

Seizing the opportunity for effecting a surprise afforded by a dense fog, the Austro-Germans delivered their attack on the 24th October, and by the 27th the five most northerly corps of the Italian 2nd Army had been defeated and were in full retreat along the front from Plezzo to Tolmino. This reverse involved the withdrawal of the Italian 3rd Army which was threatened with envelopment, and of the 4th Army, whose flank was now exposed. The Italians lost heavily in the course of their retirement; but eventually, on the 10th November, they were able to make a stand on a line which followed the course of the Piave from the Adriatic to the neighbourhood of Feltre and then bent westwards towards Asiago. The Austrians now made great efforts to break in at the north-eastern angle of the new re-entrant, and at the same time attacks were made along the Piave. The Italians, however, with the eventual assistance of a Franco-British force which came into line at the beginning of December, were able generally to hold their own; and when the battle died away at the end of the year the Italians were still in possession of the right bank of the Piave as far as Valdobbiadene, from which the front ran westwards, passing a few miles to the south of Asiago and then two miles to the north of Arsiero.

British in
1915

In 1915 command of the sea gave the British a re-entrant frontier with reference to the Turkish forces in Asia Minor; and had other geographical conditions been favourable and forces available an effective blow could have been struck at either side of the re-entrant. (Map 2.) A stroke, for instance, such as was attempted against the Dardanelles and Constantinople would, if successful, have severed Turkey in Asia from Turkish territory in Europe, and effectually prevented communication between the Turks and Germans. A successful expedition, based on Alexandretta, would both have isolated the Turkish forces in Syria and Palestine, secured the safety of Egypt and cut the Baghdad railway which formed the easiest and most direct line of communication to the Turkish army in Mesopotamia. Alexandretta, however, was quite unsuitable as a base for a large expedition; and no use, therefore, could be made of what appeared to be a geographical advantage.

When an enemy's army is standing a short distance beyond a re-entrant a force advancing from one of its sides will, if the direction of the roads and railways is favourable, be able either to strike it in flank; or will oblige the enemy, if he accepts battle, to fight on a frontage forming an angle with his line of communication, and consequently in a disadvantageous position in case of a reverse.

Germany
in 1800

This is demonstrated by the campaign of 1800 between the French and Austrians in Germany.

At the commencement of the operations an Austrian army under Kray was standing with its right, 26,000 strong, spread out from the area north of the Neckar to Renchen, while the left, about 45,000 men, was near Villingen and Donaueschingen. The principal line of communication of the left ran from Engen via Stokach, Mosskirch and Biberach to the valley of the Danube. (Map 5 on p. 140.)

Opposite this force and behind the Rhine a French army under Moreau had assembled in four groups. The right, 29,000 strong, was between Lake Constance and Laufenburg, the reserve of 28,000 near Basle, the centre, 29,000, lay near Neu Brisach, while the left, 21,000 men, was spread out between Strassburg and Hagenau.

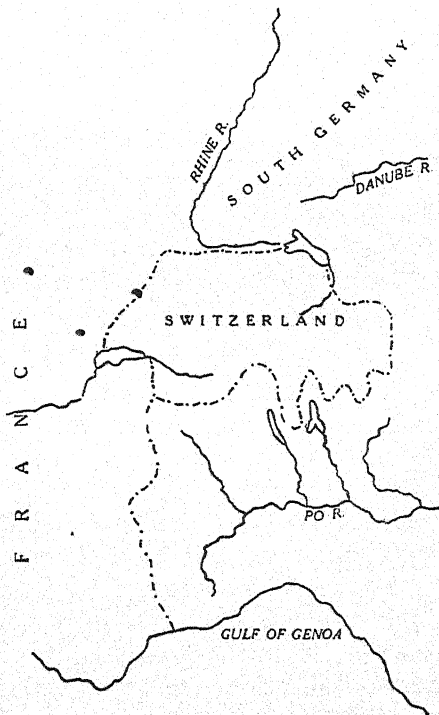
Moreau's plan of campaign was first to feint with his

left and centre, driving the Austrians into the Black Forest: at the same time the reserve was to cross the Rhine at Basle. The left was then to repossess the Rhine, and moving to Neu Brisach was again to cross the river; and the centre and reserve would meanwhile move forward and cover the passage of the right at Schaffhausen.

These operations though complicated were successfully carried out. On the 3rd May Moreau with the centre and reserve attacked and defeated 40,000 Austrians at Engen, while the right beat 9000 Austrians at Stokach, thus gaining a position directly in rear of the Austrian force at Engen. The Austrians then retired towards Lipptingen and Mosskirch.

Even when the defensive is adopted, a re-entrant front enables the enemy's line of communication to be threatened, if he advances in one mass and in any direction other than against the defending army or armies. That is to say, though territory may be uncovered it may still be efficiently though indirectly protected.

In 1877, after the Russians had forced the passage of the Danube, the Turkish front may be said to have run roughly from the Danube, through Plevna on the west and Rustchuk on the east, to the Balkans, although the only considerable force in the field was being assembled at Plevna. The presence of these troops caused the Russians to suspend their advance on Constantinople, for the purpose of dealing with this menace to their communications. (Map 2.)



The possession of a double re-entrant frontier—that is, a frontier in the shape of an M—endows a commander with the power of sending troops from one re-entrant to the other with relative ease and rapidity, for they will not be obliged to quit their own territory. (Map on p. 207.)

In the campaign of 1800, for instance, the French, who held Switzerland and were operating simultaneously in South Germany and in the valley of the Po, could move troops to and from either flank across Switzerland more quickly and with greater certainty than their opponents were able to send men from the valley of the Danube into Italy.

CONCLUSIONS.

Both salient and re-entrant fronts, then, possess reciprocal advantages and disadvantages, as regards military operations. Whether these can be used is dependent principally on the non-physical quantities such as the skill and vigour of the commander, the *moral* of the troops and on gaining the initiative. But the presence or absence of ports, roads, railways, mountains, rivers, deserts, etc., are also limiting factors. The re-entrant front, however, generally confers the power, when the direction of roads and railways is favourable, of menacing the enemy's communications without exposing one's own.

THE INFLUENCE OF SPACE, OF THE COMMUNICATIONS OF A COUNTRY AND ITS FERTILITY.

One of the principal objects of strategy is to move the largest possible forces where their action will be most harmful to the enemy, and to do so with greater rapidity than he can bring up troops to make head against them. Space, therefore, is a factor of primary importance in war: for the greater the distances to be traversed, the larger will be the proportion of available power that must be expended in the services of transportation and maintenance, and probably also of security; and the greater the time that must be taken up in movement. Again, the more extensive the areas of operations the larger will be the forces necessary for their effective occupation, and the smaller the numbers available for vigorous pressure in any given locality.

The extent of the Iberian Peninsula, and consequently the size of the force required for its conquest, was one of the main causes of Napoleon's failure to subdue Spain and Portugal. The distance of South Africa from Great Britain, and the largeness of the South African theatre of war, were the chief difficulties in the war of 1899-1902. The distance rendered the transport of troops and supplies to the theatre of war slow and expensive; the extent of the country made it difficult to bring the enemy to action without dangerous dissemination of force, which gave the Boers the opportunity of attacking and beating small British detachments. (Maps 1 and 2.)

Influence
of extent
of theatre
exemplified

In the war of 1914-18 the distances which separated the Western group of Powers from the British Dominions, Russia, Japan, the United States and Brazil, were on the whole considerably greater than those between the Germanic Powers and their allies. As a result the Western Powers were obliged to lock up larger resources in ancillary and protective services; and owing to the distances to be covered personnel and material could not so quickly be made available for use in the field as was the case with the Germans and their confederates. The number of troops maintained by the British in certain subordinate theatres of war was also affected by their distance both from the principal theatres and from the ultimate bases in Great Britain or India. Transportation, for instance, to Mesopotamia was slow and precarious; and as it was not possible to make sure that troops from France, England or India would arrive in time to meet an emergency such as the relief of Kut-el-Âmara, it became necessary to allow a considerable margin of force for the unexpected.

The fact that German manufacturing towns and munition areas were further from British aircraft bases than were London, the East Coast towns, Woolwich, Enfield, etc., from the German bases in Belgium, gave the Germans an advantage in the harassing forms of warfare.

COMMUNICATIONS.

The influence of space is necessarily modified by the means of communication and transportation that are available or can be provided.

The number, direction and quality of railways, roads and

other avenues of communication will, therefore, exercise an important effect on the conduct of a campaign; and every strategical plan must be based on the use that can be made of them.

Effect of
com-
muni-
cations ex-
emplified

Very skilful use, for instance, was made by Napoleon in 1814 of the direction taken by the roads in Champagne (p. 227).

The undeveloped state of the Russian communications in the campaigns of 1914-17, as compared with those of Germany and Austria, placed the Russians at a disadvantage; for the Germanic Powers could concentrate troops in any locality of this wide battle front far more quickly than the Russians. (Map 2.)

The roadless desert between the Turkish railways in Palestine and the Suez Canal rendered invasion of Egypt by the Turks in 1915-16 a difficult enterprise; and lack of good railways and roads in Syria and Palestine practically precluded the collection and maintenance of forces sufficient for this purpose during the short season suitable for active operations. Further, owing to the slowness with which the concentration of troops was necessarily effected, ample warning was given to the British when an attack was in preparation. (Map 6 on p. 144.)

Mesopotamia was not only situated at a great distance from the ultimate bases of both belligerents in the recent struggle, but this theatre of war was itself both extensive and undeveloped. It was, therefore, reasonably certain that, even if equal forces were available, success would incline to the power that could provide the means of communication to and within the theatre which would allow of the effective employment of the largest numbers. The British were able to accomplish this by means of sea transport to the country; and in it by the provision of shipping for the navigation of the Tigris and Euphrates, and by building railroads first from Basra to Amara and Nasariyeh, and later from Kut-el-Amara to Baghdad, and from Baghdad to Bakubah, Falujah and Hilla. (Map on p. 171.)

It will be useless, therefore, to project the despatch of large armies to undeveloped countries without harbours,

railways or roads for their maintenance and movement; it will be equally purposeless to elaborate plans of operations that cannot be carried out because means of movement are not available.

Even in civilized countries the building of roads and railways or improvement of those existing will be necessary, until cross-country transport is perfected, to enable the concentration of troops for important operations to be carried out, and their maintenance assured. Road and railway junctions, then, are evidently important factors in strategy, as their possession will confer the power of movement in this or that direction, or the power to hinder the movements of the enemy. Further, from consideration of the direction of roads and railways and of the positions of these junctions it may be possible to forecast the enemy's projects.

There is no doubt that the very large railway siding accommodation prepared, prior to 1914, on the German stations adjacent to the Belgian frontier, and the fact that ample railway facilities existed for the concentration of masses of men in this direction, pointed to the probability that, in the event of war with France, the Germans would violate the neutrality of Belgium.

Value of information as to enemy's communications

The fullest information as to the roads and railways, and also as to the position of the dépôts of supplies and munitions in a theatre of war, however, is only of value in enabling forecasts to be made as to the maximum numbers which can be moved to and maintained in any given locality. So long as an alternative exists, so long must the probable actions of the enemy remain in some doubt.

The want of good communications in Spain and Portugal, for example, enabled both French and Allies during the war in the Peninsula to forecast with reasonable accuracy from the preliminary movements of the enemy the form likely to be taken by his operations; since troops concentrated on one or other line of operations could not easily be transferred elsewhere. Notwithstanding these unfavourable circumstances, Wellington, prior to the Vittoria campaign, succeeded at first in deceiving the French as to his intentions, by moving a portion of the force under his command towards Madrid (p. 168).

The comparative absence of roads and railways exercised

a somewhat similar influence on the British operations in the South African War.

Owing to difficulties in obtaining animal transport the British were rarely able to operate at a distance from the railways; and, speaking generally, the direction taken by the railways was not such as to facilitate the lateral transportation of troops. Only one cross-connection existed, indeed, between the railways running northwards through Cape Colony and the Orange Free State, and the railways from Cape Colony and Natal were connected at Johannesburg alone. (Map 4 on p. 128.) There was therefore comparatively little choice of lines of operation, and a force once committed to a line of operation could not easily change it. In spite of these disadvantages, Lord Roberts (p. 153) was able completely to mislead the Boers as to his plans and intentions.

On the other hand, the direction of the railways in the Transvaal and Orange Free State enabled the Boers rapidly to transfer troops from the Natal to the Cape Colony front, and *vice versa*, according to the requirements of the military situation, and gave them the advantage of interior lines.

FERTILITY.

"The basis of the organization of armies," said Frederick the Great, "is victualling. With bayonets one may win battles, but it is economic conditions that decide the result of a war." To this truism it may be added that every army to a greater or less extent, according to its size and the means of communication available, is dependent for existence on the fertility of the theatre of war.

An army, for instance, cannot exist without water, and sufficient water for a large force can rarely be transported or brought for any distance even in pipe lines. Further, a bad or insufficient water-supply is the most common cause of sickness; and a force so situated would soon dissolve as was proved by the serious epidemic of enteric fever which resulted, in 1900, from the tainted water which was drunk by the British soldiers during the battle of Paardeberg.

Even in favourable conditions as regards railways and roads an army must rely in some degree on local resources for its food. Otherwise the weight of the supplies and stores

which must be sent up the line of communication will be so great that the transport required, and the difficulties of distribution, may hamper the movements of the fighting troops; or if they march at normal speed rations may not reach them. Troops ill fed, moreover, soon become susceptible of disease, which often destroys more than do bullets, shells and bayonets.

In the campaign of 1810-11 in Portugal the French under Masséna lost 25,000 men, 38 per cent. of their army. Of these, 8000 were made prisoners by Wellington, 2000 fell in action, and 15,000 died owing to famine.

Sickness also soon supervenes when men are constantly exposed to rain, heat or cold, or unprotected against mosquitoes and other carriers of disease. In the operations against Carthage, a Spanish port on the Caribbean Sea, the British troops in 1741 were in two days reduced by sickness, following on exposure, from 6645 to 3200 effectives. Much sickness, owing to want of proper shelter, was also caused amongst the men sent to Gallipoli in 1915, and during the seven months when the British held the point of the peninsula, no fewer than 96,000 were admitted to hospital. Shelter for troops is most easily provided in fertile, well-developed regions where towns and villages can be used for their accommodation. When these are not available temporary buildings must be erected, which will absorb labour and transport; or tents must be carried, for which quantities of transport will be necessary with consequent reduction both in fighting force and mobility.

It follows that when troops are operating in an undeveloped region so many of their requirements must be drawn from other sources that the maintenance of a large force is out of the question; and the fertility of the theatre of war, therefore, will be an important factor in every campaign.

INFLUENCE OF OBSTACLES.

Speaking generally, the physical influence exercised on strategy by rivers, mountains, forests, marshes and deserts, is due to the fact that being, as a rule, crossed by but few good roads or railways, they restrict and delay, or cover and protect, the movements of one or both armies. Movement is

similarly restricted or protected by the sea, which may, therefore, be considered to affect operations on land in much the same manner as would a large and unfordable river (p. 239).

It may here be noted that, as factors in a campaign, rivers, other than mountain streams, differ from mountains mainly in that they afford only one instead of several lines where the movements of an army are restricted. In the case of a river the stream itself is often the only serious physical obstacle, whereas few if any mountain ranges consist of a single chain, but are composed of several which run roughly in lines parallel to one another. Moreover, owing to the fact that the topography in the valley of a river is generally less rugged and the area better developed in the matter of roads than are mountainous districts, facilities for mutual support and for concentration of effort are greater in river valleys.

In a mountainous country, however, the local conditions often enhance the resisting power of small bodies of troops—as for example in a defile the flanks of which are difficult of access. This advantage is not so marked when large forces are concerned, for in such circumstances the topography will probably be varied, and facilities for defence in one locality will be balanced by advantages for attack in another.

An enclosed area, such as is found in the eastern counties of England, offers certain of the advantages and possesses certain of the drawbacks for military operations common to other obstacles. The roads, for instance, are practically defiles whose flanks are not easily accessible. Although security of movement should therefore be facilitated, since the flanks of a force will be difficult to attack and easy to secure, troops marching along the roads in long columns will be liable to defeat in detail owing to the difficulty of rapid deployment to the front. On the other hand, the cover afforded by the hedgerows should facilitate concealed movement, concentration of troops in favourable localities close to the enemy, and attacks by surprise. The power of concealment, the difficulty of discovering the strength of the opposing force, and the delays inseparable from movement through enclosures, may also enable superior numbers to be contained and delayed by small bodies of troops.

RESTRICTION OF MOVEMENT BY OBSTACLES.

One of the most important of the many ways in which strategy is affected by the minor geographical features is, as has been observed, to be found in the limitations they impose on the power of free movement, with all the consequences this entails. Mountains are perhaps the most serious of the physical obstacles usually encountered in war; and their influence in restricting movement is illustrated by the Pyrenees and the Cheviot Hills, where the principal roads and railways follow the more level areas between the mountains and the sea, and only these localities are therefore suitable for military operations. In Palestine, also, owing to the presence of desert to the east, and of two not inconsiderable ranges of heights which traverse the centre of the country from end to end, the main routes have been confined to the maritime plain and to Galilee, and the more important fighting has therefore always taken place in these localities only. (Map 6 on p. 144.) The Sierra Guadalupe range, over which there were no practicable roads, separated the Spanish forces commanded by Cuesta and Venegas, in Spain in 1809, while the French possessed a fairly good line of communication along the valley of the Tagus (p. 180). This was naturally favourable to the French, who could concentrate troops against either of the Spanish forces more rapidly than the Spaniards could concentrate to oppose them. (Map 8 on p. 196.)

Rivers, though perhaps less formidable than mountains, are more often encountered in war. A good example of their effect is to be found in the campaign of 1814 in Champagne, where the rivers restricted the movements of the Allies, and afforded Napoleon the opportunity of beating them in detail (p. 227). Again the marshes of the Dyle, the roads over which were thought to be impracticable for artillery, prevented Grouchy in the Waterloo campaign from joining Napoleon on the field of Waterloo; and this was one of the principal causes of his defeat. (Map 7 on p. 178.) The wide estuary and marshy valley of the Somme, which traversed the area behind the British lines in France, made lateral communication difficult after the Germans had forced back the British right nearly to Amiens in the spring of 1918. (Map 12 on

216 RESTRICTION OF MOVEMENT BY OBSTACLES [CH.

p. 252). The presence of the Tigris both limited Maude's operations in Mesopotamia in 1917 and was of assistance as regards the maintenance of his army (p. 170).

Troops must be embarked for passage over the sea, and although when once afloat large forces can, as has been pointed out (p. 78), be moved rapidly over long distances, this does not apply to short journeys; for the very fact of the embarkation and disembarkation, which can only be carried out slowly and in comparatively few localities, places a limit on the power of movement. A division, for instance, could march from Dover to Calais, were they connected by an isthmus, more quickly than it could be transported in steamers.

Deserts

Perhaps the most uncompromising of all obstacles is a desert, for even the most modern appliances are not of much value in overcoming lack of water and shifting sand. The presence of desert between Souakim and Berber caused Lord Wolseley, in 1884, to choose the longer Nile route when advancing to the relief of Gordon who had been shut up by the Dervishes in Khartoum. (Map on p. 120.) The region of desert and swamp followed by the course of the Tigris restricted the operations of the British and Turks in 1914-17 to the areas bordering on the river. Neither Turks nor British were able to send large numbers across the desert in the Sinai peninsula, and the principal actions in 1916-17 took place in the comparatively fertile region on the coast of the Mediterranean.

Forests and enclosures

The presence of forests or of enclosed areas adds considerably to the difficulty of operations. The Russians, for instance, were unable to conquer the inhabitants of the Caucasus until, in 1845, they cleared the forests with which the mountains were covered. The British in 1914 found that the enclosed country in parts of Flanders made tactical progress slow and difficult.

Strategical points

Since, then, the existence of obstacles tends to restrict movement, it follows that permanent bridges over rivers, for temporary bridges are only makeshifts and to be of continuous value require metalled approaches; passes over mountains; roads and railways through forests and deserts and over marshes; oases in deserts, and sea ports and

harbours, are, like road and railway centres, often important strategical points, as their possession permits of or facilitates the passage of obstacles.

It is, therefore, sometimes claimed that the mere possession of some bridge, mountain pass or road-junction will enable an army to dominate large neighbouring tracts. For example, it has been said that Baghdad dominates Mesopotamia. (Map on p. 60.) Clearly, however, the power to control Mesopotamia from Baghdad would be dependent on the possession of force sufficient to take advantage of its central position, and not on mere occupation of the city.

The scope of operations in mountainous, desert or un-Transport developed areas is also limited by the necessity for special forms of transport.

Fast-travelling heavy mechanical vehicles, for instance, cannot be used on narrow winding paths, on the shingle of river beds or on sandy tracks, for which slow-moving pack transport must generally be provided; and this not only reduces mobility, but, since pack animals or porters consume large quantities of food and water, while their carrying capacity is limited, it also restricts the size of the forces that can be maintained.

Thus, owing to the rugged and comparatively roadless condition of the Greco-Serbian borderland, it was found necessary to re-equip the British forces sent to Salonika, in 1915, with pack and light wheeled transport. One hundred thousand porters are said to have been used, in 1917, in the campaign in German East Africa to supplement other means of transport. In Egypt, in 1917, owing to the absence of water and of good roads leading to the Turkish position which extended from Beersheba to Ghaza, it was necessary to allot practically the whole of the animal transport available for the British force, including 30,000 pack camels, for the maintenance of the troops of the right wing which successfully attacked Beersheba. This arrangement enabled them to be supplied with food, water and ammunition when operating some fifteen or twenty miles only from the nearest British railhead. (Map 6 on p. 144.)

THE EMPLOYMENT OF OBSTACLES TO DELAY THE ENEMY.

When acting on the defensive, advantage is sometimes taken of the presence of obstacles to gain time or to escape from the enemy's pressure.

An attempt was made by Napoleon, in 1813, after his defeat at Leipzig, to utilize the Rhine for the purpose of delaying the advance of the Allies, and of gaining time for the assembly of an army in France. Accordingly, at the beginning of November, his available troops were spread out along the left bank of the river; Victor with 16,000 men holding the area from Hunigen to Landau, Marmont with 18,000 being along the line from Landau to Coblenz, while Macdonald with 20,000 was disposed from Coblenz, downwards. (Map 11 on p. 230.) The Allies did not cross the Rhine until the end of December.

Similarly, in 1904, the Russians, who wished to gain time for the arrival of reinforcements, sent a detachment of about 18,000 men, under Zassulitch, to the river Yalu; and he was instructed to delay the Japanese, who were advancing through Korea, but to avoid decisive action against superior numbers. (Map on p. 72.) The advanced troops of the Japanese reached the left bank of the Yalu about the 8th April; on the 21st the concentration of the army had practically been completed, and on the 1st May the passage of the river was forced.

The Germans in 1914 also withdrew behind the Aisne, after their defeat on the Marne, in order to gain time for the arrival of reinforcements. (Map 12 on p. 252.)

In 1914-15 the object of the British was to economize troops in the defence of Egypt, and the best way to do so was to delay the Turks and increase their difficulties should they attack. A line of defence, therefore, was adopted running generally along the western side of the Suez Canal; which possessed the further advantage that it could be approached only by traversing the desert, and for a great part of each year almost waterless, region of the Sinai Peninsula. (Map 6 on p. 144.)

In 1809 Wellington and Cuesta, when menaced by an overwhelming force of French, took refuge behind the Tagus and so avoided a battle (p. 183).

PROTECTION, CONCEALMENT AND COVER BY
OBSTACLES.

Use also is often made of the presence of obstacles to secure protection, concealment and cover from the enterprises of the enemy.

Napoleon considered that an invading army should, if possible, march in such direction that one or both flanks—its weakest points—would be protected by a natural obstacle, or by neutral territory; and following this principle during his advance in 1808 from Coimbra to Vimiero, Wellington kept his army near the sea, thus securing the right flank. (Map 8 on p. 196.)

Pro-
tection by
obstacles

In 1814 the marshy tract of the Landes was also used to safeguard the British force, which was investing Bayonne, both from the French army operating under Soult between the Gave and the Adour, and from any French troops that might be levied in or near Bordeaux. (Map 10 on p. 226.) In the same campaign Soult was ordered by Napoleon to move, after his defeat at Orthes, in the direction of Pau, with the object of gaining a position where the left of the French would be protected by the Pyrenees. At the same time the Allies would be drawn away from the sea, on which their army was based, and would be prevented from penetrating into the centre of France. Soult had already anticipated these instructions by marching to Marsiac, Maubourget and Rabastens, from which, as Wellington advanced up the Adour he subsequently fell back to Tarbes and via St Gaudens to Toulouse.

After the early stages of the great war in 1914-18 both sides endeavoured to secure their flanks by resting them either on the sea or neutral territory, even at the risk of adopting attenuated frontages in doing so. The western front extended from the Channel to neutral Switzerland, the Italian from Switzerland to the Adriatic, the Macedonian from the Adriatic to the Aegean; and the Russian at first from Rumania to the Baltic, and when Rumania made war on the Germanic Powers, from the Black Sea to the Baltic. (Map 2.) On a small scale the Turks also used obstacles to secure the flanks of the main position in which their troops covered the investment of the British in Kut-el-Amara, the right resting on

the Tigris, the left on the Suwaikiah marsh. (Map on p. 171.) The water off the coast of Palestine is shallow and the coast has but few accessible ports. In 1917, therefore, the Turks placed their right at Ghaza, where it would be secured by the sea, and their left was in the desert to the east of Beersheba. (Map 6 on p. 144.)

Conceal-
ment by
use of
obstacles

Although the development of aircraft has reduced the value of obstacles in concealing the movements of troops, few campaigns of the past are without examples of their employment for both concealment and protection from the enemy.

As has been pointed out, Cromwell, in 1648, used the Pennine Chain to cover the movements of his force (p. 151). Napoleon, in 1796, marched his army under cover of the Po against the communications of Beaulieu's army (p. 223). Marmont employed the Douro in 1812, prior to the battle of Salamanca, to conceal and protect the movements of the French army (p. 164).

In 1813 Napoleon concentrated a force, some 230,000 strong, behind the Thuringer Wald for operations against the Prussians, Austrians and Russians, while the line of the Saale, which was held by 70,000 men under Eugene, was used as a screen for his movements. (Map 13 on p. 260.) Similarly, at the commencement of the Waterloo campaign, the French army was concentrated behind the forest of Beaumont (p. 177). The forests round Orleans completely concealed, in November 1870, the presence of 100,000 French from the Germans. A portion of the French army which made the successful attack on the 18th July, 1918, on the German forces between the Ourcq and Aisne assembled under cover of the forest of Villers Cotterets (p. 202). And in September the troops massed on the British left in Palestine were concealed in the groves at Ramleh, Ludd and Jaffa prior to attacking the Turks (p. 143).

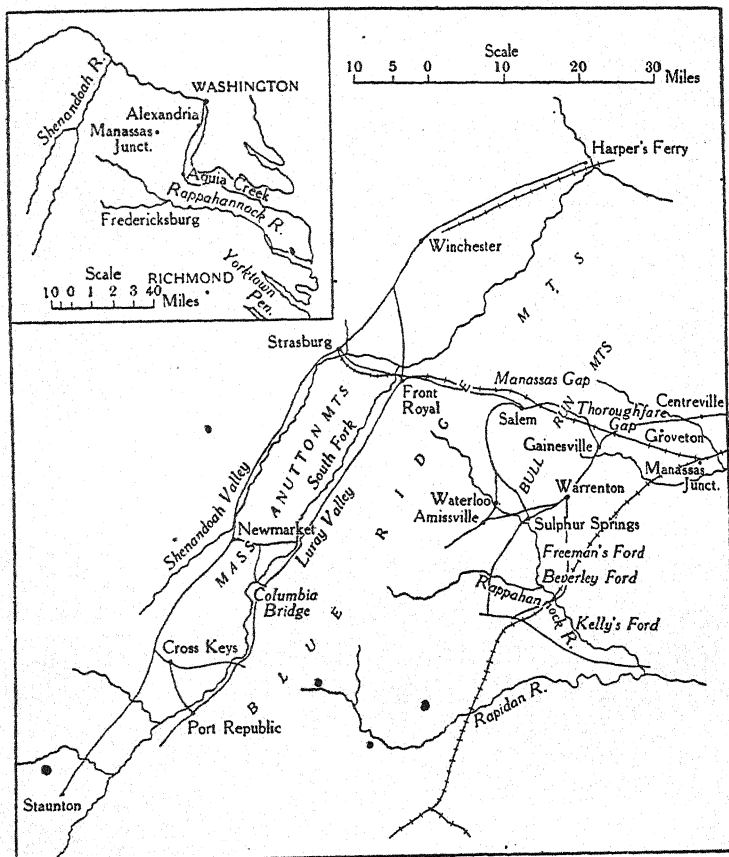
Virginia
in 1862

The campaign in Virginia in 1862 illustrates the use made of a range of mountains to screen and protect an outflanking movement.

After his victory over McClellan in the Yorktown Peninsula, Lee, the Confederate commander, marched, in August, with some 50,000 men against a Federal force of

about the same strength standing, under Pope, behind the Rappahannock, the main body being between Freeman's Ford and Kelly's Ford.

On the 21st Lee pushed Longstreet with 30,000 men to a position opposite Kelly's Ford, while Jackson with 22,000



men, including 2000 cavalry under Stuart, was sent to Beverley Ford.

On the 22nd and 23rd Jackson marched up the Rappahannock to Sulphur Springs, Longstreet being transferred to Beverley Ford.

The Federals conformed to these movements, and, in the course of some skirmishing, a portion of Pope's correspondence was captured. From this it was discovered that large reinforcements were on their way to join Pope from

McClellan's army, which had been transferred by sea to Aquia Creek; and that a strong force of Federals had also assembled at Washington.

Lee thereupon resolved on the daring plan of striking at Pope's communications, in the hope of forcing him to fight at a disadvantage and of gaining a victory before the arrival of the reinforcements. Jackson, therefore, was sent northwards on the 25th and 26th under cover of the Bull Run Mountains; and marching via Amissville and Salem, and through Thoroughfare Gap, he captured and destroyed a Federal supply depôt at Manassas Junction.

On the afternoon of the 26th Longstreet was ordered to follow Jackson, leaving one division, 5000-6000 men, at Waterloo to cover his movements and mislead the Federals.

On the 26th Pope heard of Jackson's presence at Manassas Junction, and on the 27th moved his army back to Gainesville and Manassas Junction.

The Federals, who meanwhile had received some reinforcements, were engaged on the 27th and 28th with Jackson, who had withdrawn to Groveton. The action was continued on the 29th, when Lee came up with the troops under Longstreet, and on the 30th Pope was defeated and fell back first to Centreville, and then to Alexandria and Washington.

EMPLOYMENT OF OBSTACLES FOR THE DEFEAT OF THE ENEMY.*

Both in offensive and in defensive operations advantage has often deliberately been taken of the presence of obstacles to create opportunities for effecting the defeat of the enemy. For this purpose an attempt is generally made to obtain the control of the points of passage. These can then be used either so to delay the enemy's movements that an opportunity will occur of attacking his forces when at a disadvantage; or to facilitate the operations of our own troops, so that those of the enemy may be attacked and defeated in detail.

When manœuvring against the enemy's lines of communication Napoleon, if possible, took as his first objective some river or defile crossed by them. The locality selected was generally at such distance from the enemy's army as to render its seizure a matter of probability before the enemy

could either anticipate the French, or retire beyond the obstacle: at the same time it was not so far from the enemy's main body as to leave him room to escape by making a detour. Having secured the passage or passages, and therefore taken steps to delay and hinder the enemy's attempts to escape, it was then Napoleon's policy to turn against and attack the army.

In May 1796 Napoleon employed this method when he attempted to seize the passages over the Adda and intercept the Austrians. (Map 9 on p. 224.)

Napoleon
in 1796,
1800 and
1805

At the commencement of the operations the Austrian army under Beaulieu, 30,000 strong, was standing with the main body at Vallegio, and there were detachments on the Sesia, and on the Ticino at Buffalora and other places. About 30,000 French were between the Bormida and Scrivia.

Detaching a force towards Valenza as if about to cross the Po there, Napoleon pushed the remainder of his army to Piacenza, where the passage of the river was commenced. Owing to slow progress, however, due to the bad state of the men's boots, to delay in crossing at Piacenza where the French were ferried over the river, and perhaps also to the fact that Piacenza was too near the enemy's position, the Austrians were able to escape. On hearing of Napoleon's movements they had retired hurriedly eastwards, and reaching the Adda before the French withdrew the bulk of their army across the bridge at Lodi.

• In 1800, prior to the battle of Marengo, Napoleon's first care was to seize and secure the passages over the Po and the Ticino and the defile of Stradella (p. 204).

In the Ulm campaign also he first secured the crossings over the Lech and then turned on Mack (p. 139).

Napoleon was obliged to use infantry or horsemen to intercept his opponents; but it is not impossible that aircraft may in future be more effectively employed in applying these principles. To this end squadrons may be pushed out to interrupt the enemy's communications, and by breaking bridges or blocking tunnels to hamper and delay his movements. They may thus create opportunities for the envelopment of the whole or of portions of his armies.

Cromwell
in 1648

Cromwell's operations against Hamilton, in 1648, illustrate the advantage that may be taken of the presence of an obstacle over which free passage has been secured, and when the enemy advances along one side of it without taking adequate measures against an attack in flank. In this campaign the Scots were first delayed by Lambert and subsequently defeated by Cromwell (p. 149).

Shenandoah in
1862

In his operations in the Shenandoah Valley, in 1862, Jackson made use of obstacles lying parallel to the line of operations, to secure the defeat of the enemy's armies in detail. (Map on p. 221.)

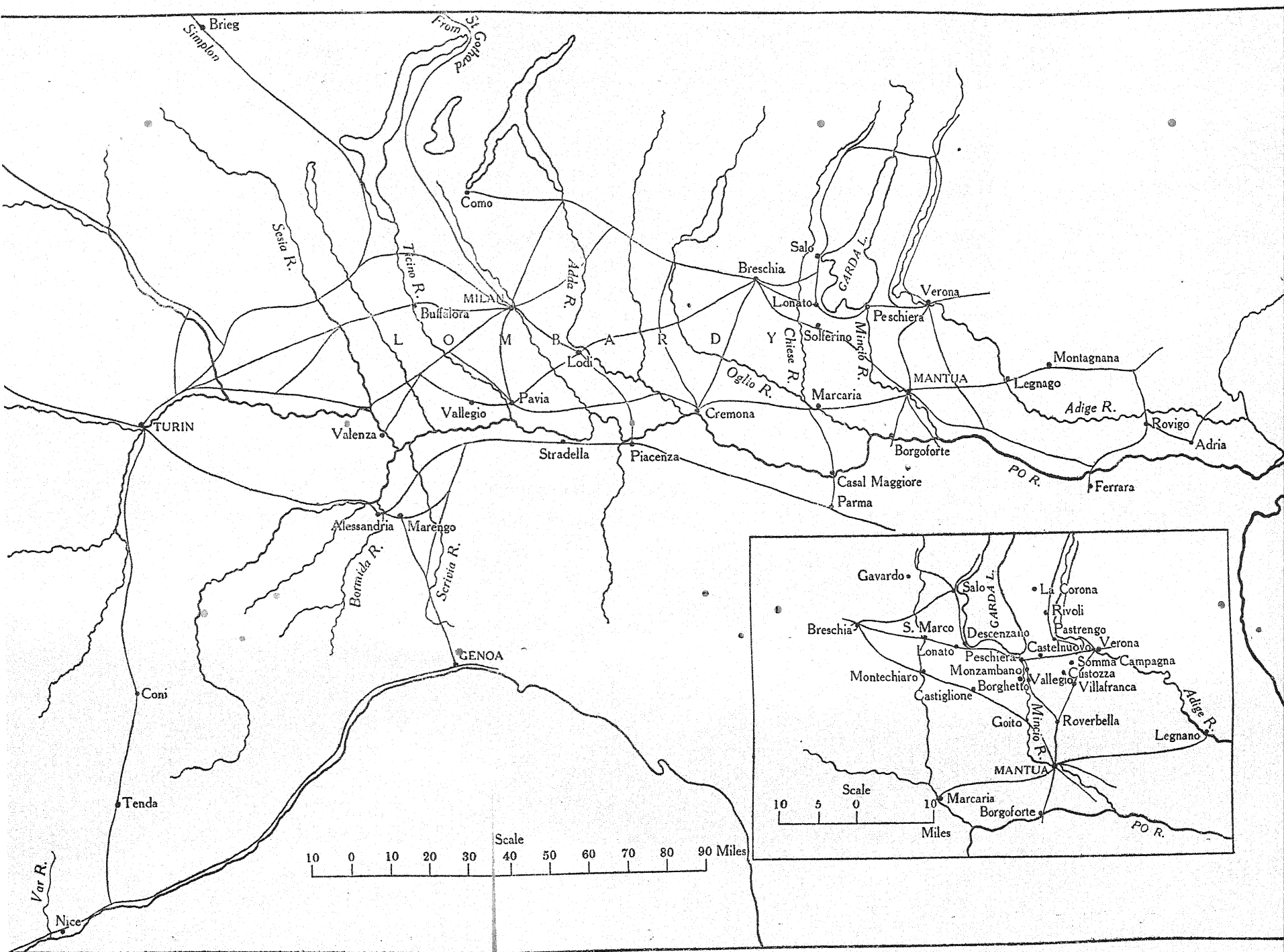
About the middle of May a Federal force of some 8000 men was at Strasburg under Banks, there were 1500 at Winchester, a detachment of 1000 stood at Front Royal, and 500 men were at other stations on the Manassas Gap railway.

Under instructions from Lee Jackson now took the initiative, and at first advanced down the Shenandoah Valley, with about 17,000 Confederates, as if to attack Banks; but on reaching Newmarket crossed the Massanutton range, using the mountains to screen his movements, and descended into the Luray Valley on the 21st May. On the 23rd Jackson surprised, attacked and captured practically the whole of the force at Front Royal, and on the 25th defeated Banks, who had fallen back to Winchester, subsequently pursuing the Federals to Harper's Ferry. Large forces of Federals were now moved against Jackson from the areas east and west of the Valley, and he was obliged to hurry southwards to avoid being cut off.

The Confederates having safely regained Front Royal retired up the Shenandoah Valley, a detachment being sent into the Luray Valley to destroy the bridges over the South Fork.

The Federals pursued in two columns, one of about 15,000 under Frémont following Jackson and the main force of the Confederates, while another of 10,000, commanded by Shields, advanced up the Luray Valley and to the east of the river. The Federal forces were therefore separated both by a range of mountains, and by a river the bridges over which could be controlled by the Confederates.

On the 8th June Jackson turned and defeated Frémont at Cross Keys, half of the force under Shields being then



at Columbia Bridge, while the remainder were east of the South Fork and near Port Republic. Crossing the South Fork on the next day Jackson attacked and drove back the two leading brigades, 4000 strong, of the troops under Shields. The Federals then retired northwards.

USE OF OBSTACLES BY THE DEFENDER.

When the strategical defensive has been adopted an obstacle can probably be turned to best advantage by arrangements for attacking the enemy as his army is in the act of crossing, and when part is on one side and part on the other side of the obstacle. At the same time suitable measures would be taken for the security of the remainder of the front against other attempts of the enemy.

This method is illustrated by Soult's campaign on the Nive and Adour in 1813. (Map 10 on p. 226.) Soult in
1813

In consequence of the British success over the French at the Nivelle, early in November, Soult detached General Paris with 2000 men to secure the district near Lahousoa, and then fell back to the Nive and Adour. Here the French took up a position in front of a bridgehead which had been constructed on the left bank of the Adour and round Bayonne.

On the French right Reille with 10,000 men held the hills to the south of Biarritz and Anglet, Clausel stood with about 10,000 men near Urdains, a reserve of about 8000, under Villatte, was behind Clausel and Reille, and 9000 men were in garrison in the works at Bayonne. The left of the French army, 24,000 strong, under D'Erlon, was in a cordon extended along the right bank of the Nive, the bridges having been broken from Cambo to the entrenchments at Mouserolles.

Wellington's force was placed generally opposite the French army. South of Itsatsu was Morillo's Spanish division, about 7000 strong, which was also watching the entrenched position and fortress of St Jean Pied de Port. The British right, under Hill, some 12,000 men, consisting of the 2nd and Portuguese Divisions, stood from Itsatsu to Cambo; the centre, commanded by Beresford, comprising the 3rd and 6th Divisions, 14,000 strong, extended from Ustarits to Arcan-

gues; on the left, under Hope, were the 1st, 5th and Light Divisions, and other troops, in all about 24,000, stretching to Bidart. In reserve were the bulk of the cavalry, and the 4th and 7th Divisions at Espelette and Ascain.

Detailing Hope, supported if necessary by the 4th and 7th Divisions, to contain the French forces standing between the Nive and the sea, Wellington, on the 9th December, sent Morillo, Hill and Beresford across the river; and, as might have been expected, drove D'Erlon's scattered force without difficulty to Petite Mouguerre and Villefranche. On the British left Hope gained Bassussary and Anglet, but owing to heavy rain subsequently withdrew the bulk of his troops to quarters in Arcangues, Arbonne and their vicinity. The 4th and 7th Divisions halted at Ustarits and Habençen.

Soult now skilfully took advantage of the fact that Wellington's army was astride the Nive and so placed that the two parts could not readily assist one another, and decided to attack Hope who was covering the British communications to St Sebastian and the neighbouring ports. D'Erlon's four divisions were therefore moved to the left bank of the river, the garrison of Bayonne being detailed to hold the entrenchments at Mouserolles.

The attack of the French was at first victorious, but owing to the rain, which had rendered movement difficult, to the absence of space for deployment, and to the lack and indifferent quality of the roads and tracks, Soult was unable to deploy his army with sufficient rapidity to confirm his initial success. By evening, therefore, the French had only retaken the heights to the south of Biarritz and Anglet, and those of Bassussary. Wellington meanwhile was able both to bring up the 4th and 7th Divisions from Ustarits and Habençen to check the enemy, and to move Beresford's force across the Nive at Ustarits. At nightfall Hill had occupied Petite Mouguerre and Villefranche, Morillo was at Urcuray facing Paris, while Beresford, now with the 3rd, 4th and 6th Divisions, was on the line Ustarits and Arcangues.

Owing to bad weather the 11th and 12th December were passed in skirmishing without advantage to either side, but Beresford succeeded in throwing a bridge near Villefranche so as to facilitate any future movements of his troops across the Nive.

Soult now decided to turn against Hill and Morillo; and leaving Reille with one division, the reserve and the garrison of Bayonne to hold the bridgehead entrenchments, he concentrated the remainder of his army on the evening of the 12th on the right bank of the Nive.

This movement was noticed by the British, who also observed numbers of camp fires east of the Nive and but few to the west of the river.

During the night of the 12th/13th the bridge at Villefranche was swept away by floods. On the morning of the 13th Soult forced Hill back to St Pierre, but as before the French could not deploy with sufficient rapidity. Time was therefore allowed for the restoration of the bridge at Villefranche, over which Wellington brought first the 6th, then the 4th Division, followed by two brigades of the 3rd and two brigades of the 7th Division. Soult thereupon fell back to Bayonne.

The Sikhs adopted a similar plan at Sobraon, and in this case the British preferred to make a direct attack on a prepared position rather than to risk defeat in detail by endeavouring to cross the Sutlej elsewhere (p. 173). ^{Sikhs in 1846}

Another method of utilizing the opportunities afforded by physical obstacles to bring about the defeat of the enemy is illustrated by Napoleon's campaign in France, in 1814, against the allied Austrian, Russian, Prussian and other forces. (Map II on p. 230.) Owing to the difficulty of maintaining their armies the Allies were obliged to move by separate routes as they advanced on Paris. The direction taken by the main roads which followed but crossed and recrossed the Marne, Aube, Seine and Yonne involved their separation by these rivers also, and of this the Emperor took advantage to defeat them in detail. ^{Napoleon in 1814}

Towards the end of December 1813 two large armies had invaded France under Blücher and Schwarzenberg.

At the end of January Blücher's force of 90,000 was in the area St Mihiel, Brienne, Lesmont, less the detachments that were blockading the French frontier fortresses; Schwarzenberg, whose army had originally consisted of 120,000 men, had gained the area Joinville, Chaumont, Bar, but had also detached troops to invest the French fortresses and to watch Lyons, held by a French force under Augereau.

On the French side Mortier with the Guard, 25,000 strong, was at Troyes; Victor and Ney with 16,000 men were at Vitry; Marmont with 18,000 between St Mihiel and Vitry; and Macdonald with 20,000 was nearing Châlons, having fallen back before Winzingerode, who was advancing at the head of 30,000 men from Holland.

On the 1st February Napoleon, who had concentrated his whole army at La Rothière, with the exception of the force under Macdonald, was defeated by the bulk of the combined forces of Schwarzenberg and Blücher; and the next day Macdonald was attacked at Châlons by the remainder of Blücher's army.

After this reverse Napoleon fell back to Troyes to await the course of events, and on the 5th February Macdonald evacuated Châlons.

The roads available for an advance being few, the Allies now decided to adopt the alternative of separation in preference to formation in great depth. Blücher therefore moved with about 60,000 men on Châlons and thence along the Marne by Epernay and Château Thierry, and also by Champaubert; while Schwarzenberg marched on Troyes and Montereau.

The two armies were consequently split up by the Seine and Aube, the crossings over which were held by the French, and were exposed to defeat in detail.

As soon as he became aware of the movements of the Allies, Napoleon skilfully retired to the neighbourhood of Sezanne and to Nogent, in order to gain a central position between the enemy's armies. Here reinforcements from Spain joined the army, and these, with some newly raised units, were placed under the command of Oudinot.

The Emperor now detailed Oudinot at Bray with 10,000 men, and Victor at Nogent with 14,000, to hold off Schwarzenberg. He then turned on the 9th February, with some 45,000 under Marmont, Mortier and Ney, against Blücher, whose army had in the meanwhile become a good deal scattered while driving Macdonald back beyond La Ferté sous Jouarre.

In spite of great difficulties owing to the bad state of the cross-roads over the rolling country between the rivers, Napoleon reached Champaubert on the 10th. Here the

French routed a detachment from Blücher's army, and drove a wedge into the long column which was spread out between Château Thierry, La Ferté sous Jouarre, Montmirail, Champaubert and Vertus.

Directing Marmont to remain at Étoges with about 7000 men for the purpose of containing the enemy's troops some 15,000 strong at Vertus, Napoleon advanced on the 11th against an allied force of 20,000 men at Montmirail and La Ferté sous Jouarre. This was defeated and driven on the 12th across the Marne together with the group that was holding Château Thierry.

Meanwhile Blücher himself had moved with 20,000 men against Marmont, who on the 13th withdrew to Vauchamps.

Detaching Mortier to follow the allied troops north of the Marne, Napoleon marched on the evening of the 13th to join Marmont, and on the 14th defeated Blücher who retired to Châlons followed by Marmont's force.

While these events were taking place Schwarzenberg, on the 13th, had forced the passage of the Seine at Pont sur Seine, Nogent and Bray, and on the 14th and 15th occupied Nangis and Fontainebleau, headquarters being at Nogent. Victor and Oudinot had meanwhile fallen back to Guignes, where they were joined first by Macdonald, and then, on the 16th, by Napoleon.

On the 17th February Napoleon attacked and drove back the army of Schwarzenberg, which now had also become unduly extended. Next day he won the passage of the Seine at the bridge of Montereau, whereupon the Allies retired to Troyes.

POSITION BEHIND AN OBSTACLE.

When a commander has elected or has been obliged to take up a position behind an obstacle, or obstacles, lying at right angles to his line of operations, it is generally accepted that a portion of his force should be detailed to watch the points of passage with the object of ascertaining the movements and dispositions of the enemy. The main army should be so placed that it can readily march against and overwhelm the enemy while he is engaged in crossing the obstacle, or entangled amongst them if there is more than one. For instance, the bulk of the troops may be placed in the most vulnerable

locality, such detachments being temporarily posted at other points that premature movements of the main body for their protection may be obviated. At the same time every arrangement should be made for the rapid concentration in any direction of all available field troops by rail and motor, and for their maintenance when concentrated. The success or failure of this method of beating the enemy in detail is clearly dependent on the skill and judgment with which the movements of the troops are timed, and also on whether those of the enemy's forces can be accurately gauged and anticipated. It depends, in fact, on whether the enemy will or will not be able to bring the main body of his army over the obstacle before he is attacked in force.

Of the possible alternatives it may be said that to extend an army in cordon along an obstacle will result in weakness everywhere, unless the force is so large that all localities can be securely held. The enemy, therefore, will certainly break through wherever an attack in force is delivered. On the other hand to concentrate in one or two localities only, is to leave the remaining points of passage free for the use of the enemy's army. Neither course, therefore, is to be advocated.

Use of
position
behind an
obstacle
illus-
trated

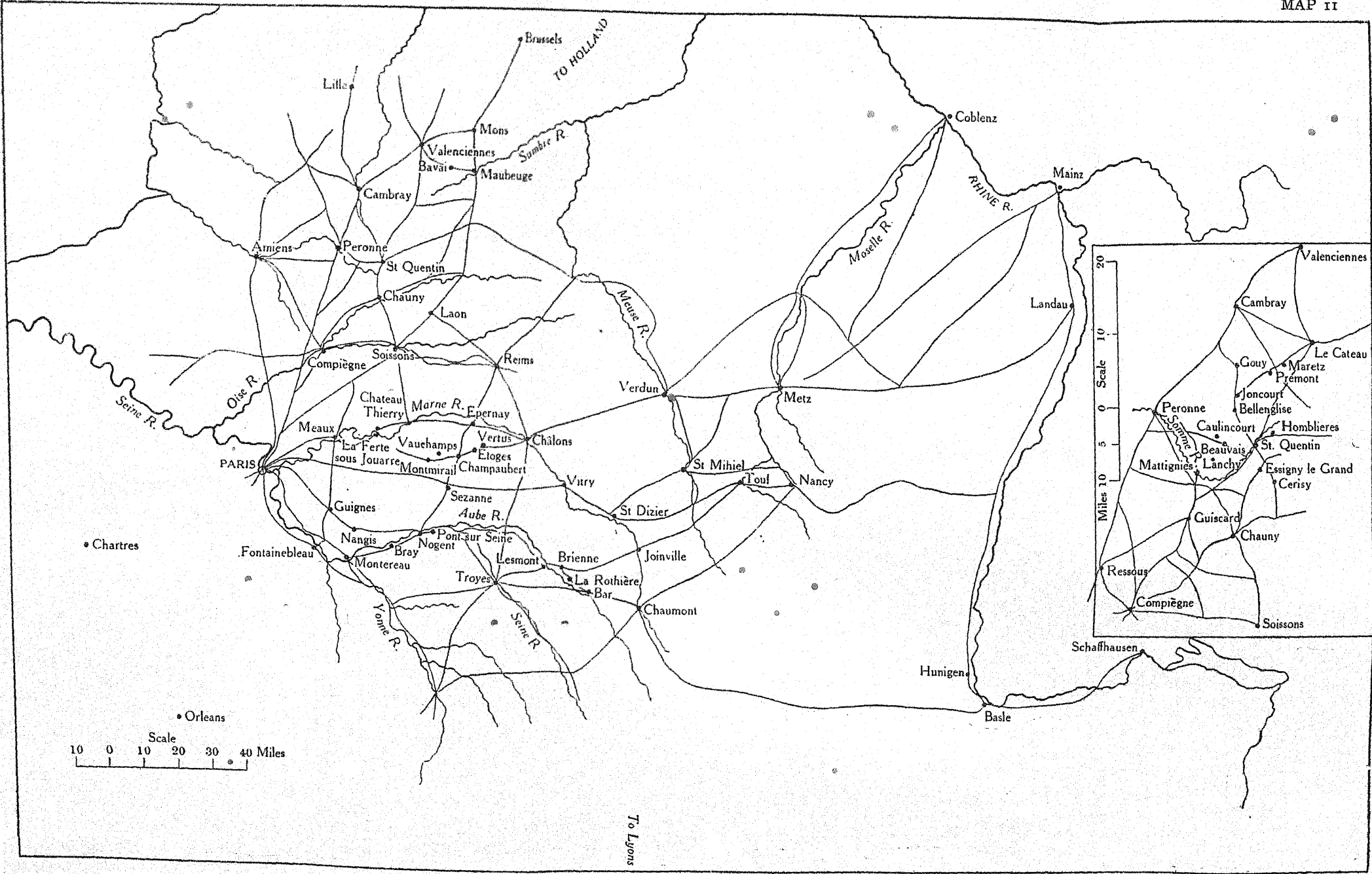
The successful application of the principle of watching the points of passage while retaining the bulk of the army in reserve is exemplified in the operations of the Austrians at Aspern in 1809, and in the campaign of 1866 in Italy.

The disadvantage of extending troops along an obstacle is shown by D'Erlon's reverse on the Nive (p. 226) and by the passage of the Bidassoa (p. 233). The drawbacks of overconcentration are illustrated by Gough's success over the Sikhs on the Chenab (p. 235).

Aspern
1809

After his victories in 1809 at Landshut and Eckmühl over the Austrian Archduke Charles Napoleon advanced on Vienna, which was captured on the 13th May. (Map 3 on p. 124.)

The positions of the two main armies were now as follows. At and round Vienna were the French corps of Lannes and Masséna, the Guard, and a large force of cavalry, in all about 70,000 men, while Davoust's corps, 30,000 men, was at St Polten, Molk and Pochlarn. The Archduke with about 80,000 men was standing on the north bank of



the Danube between Korneuburg, Enzersfeld, Great Ebersdorf and Strebersdorf, 25,000 men were near Krems, and the line of the river was being observed between this place and Presburg.

The Emperor now resolved to force the passage of the Danube at the island of Lobau, to which bridges were accordingly constructed.

On the evening of the 20th May, during the night of the 20th/21st and early on the 21st, three divisions of Masséna's corps and three cavalry divisions, a total of some 25,000 men, were pushed across bridges thrown from Lobau to the north bank of the Danube.

As soon as the significance of the movements of the French was apparent the Archduke, leaving one division at Bisamberg to watch Davoust, advanced with the remainder to attack the French, in the hope of beating them in detail. At the same time, the troops higher up the river were ordered to float down boats and logs with the object of breaking the bridges of the French, already strained by the rapidity of the current.

The French, however, who had secured the villages of Essling and Aspern held their ground on the 21st with the help of a fourth division, about 6000 strong, which arrived in the evening.

On the 22nd the battle was continued, the Austrians being reinforced by the division from the Bisamberg, while the Emperor brought into the field the bulk of the corps of Lannes as well as part of the Guard, which raised the numbers of the French to some 55,000.

During the morning the French gained ground, but now the principal bridge from the south bank to Lobau was broken by the boats and logs floated against it. Since neither ammunition, nor reinforcements which had arrived from Davoust could be sent over the river, the Emperor decided to fall back to Lobau, removing all the bridges which had been made to the north bank of the Danube.

At the commencement of the campaign of 1866 in Italy ^{Austrians in 1866} the Austrian field army, about 80,000 strong, was standing towards the middle of June with the main body near Montagnana; a cavalry brigade, reinforced by a battalion, watched the passages over the Mincio from Monzambano to Goito,

and an infantry brigade, with a regiment of cavalry, was guarding the crossings over the Po near Rovigo and Adria. (Map 9 on p. 224.) The remaining points of passage over the Mincio were secured by the garrisons of the fortresses of Peschiera and Mantua, and the fortresses of Verona and Legnago were also held by adequate forces. Of the Italian army, 200,000 strong, the 4th Corps stood between Ferrara and Borgoforte. The main body of about 120,000 was west of the Mincio, the 3rd Corps being at Casal Maggiore, the 2nd near Lodi, the 1st at Lonato; and near Como was a force of irregulars under Garibaldi.

On the 23rd June the Italians crossed the Mincio at and between Goito and Monzambano, the Austrians making no attempt to dispute the passage.

In these circumstances the Italians concluded that the Austrians would fall back behind the Adige. It was therefore decided to advance to the area between Mantua, Verona and Peschiera, with the object of covering the passage of the 4th Corps over the Po.

On the 24th, consequently, the 3rd Corps with a cavalry division was ordered to move on Villafranca and Somma Campagna; the 1st Corps, leaving one division to watch Peschiera, was to advance on Castelnovo; while the 2nd Corps was to take up a position at Goito and Roverbella, detaching two divisions to observe Mantua.

Meanwhile the Austrian commander, finding that the main body of the enemy had crossed the Mincio, and aware that owing to heavy rain the Po was practically impassable, determined to attack the divided forces of the enemy. Leaving the cavalry brigade and other troops to watch the Po, the army was accordingly concentrated by the evening of the 23rd, a reserve division at Pastrengo, the 5th, 7th and 9th Corps near Verona, and a reserve cavalry brigade at Villafranca.

On the 24th the Austrians attacked and defeated at Custoza the left wing and centre of the Italian army, consisting of the 1st and 3rd Corps, while the right was contained by the Austrian cavalry. In the evening the Italians fell back to the Mincio, which was recrossed on the night of the 24th/25th.

FORCING THE PASSAGE OVER OR THROUGH AN OBSTACLE.

The chief factor which makes for success when the forcing of the passage over or through an obstacle is in question, is the deception of the enemy as to the locality where the main effort is to be made. But the obstacle should, when possible, also be utilized for the concealment and protection of the movements of the troops.

When the enemy possesses the power of unmolested passage over the obstacle, owing, for instance, to the existence of a bridgehead, the position can be assaulted as was done by Gough at Sobraon (p. 173). Alternatively the plan adopted by Wellington against Soult at Bayonne can be followed (p. 225). In this case a force was detached to watch and contain the defenders of the bridgehead, while the remainder of the army crossed the obstacle elsewhere. Again, the whole army can pass the obstacle in some other locality, and at such distance from the bridgehead as to be reasonably secure from attack. This expedient was employed by Napoleon in 1805, prior to the investment of Mack in Ulm (p. 139).

When free passage over an obstacle has not been secured for the defending force, a position will usually have been occupied behind it. In these circumstances the enemy's frontage, if found to be long, will generally be engaged and broken at one or more suitable points. Should the enemy's force be concentrated on a short frontage his attention can be occupied while the position is turned by movements round one or both flanks. If the enemy is merely watching the line of the obstacle and holding his main force in hand, the attacker will probably try to pass over as many troops as possible in one or more convenient localities, so as to be in position to meet the enemy's counter-attack in favourable conditions. Direct attack on positions that are strongly fortified and held will be avoided if possible; since the attacking troops will be fighting under the disadvantage of being obliged, as were the French at the island of Lobau (p. 231), and the French and British at the Aisne in 1914, to pass the obstacle in the presence of the enemy's main forces.

Wellington's passage of the Bidassoa, in 1813, affords an instance of a successful assault on a portion of a long frontage occupied by the enemy. (Map 10 on p. 226.) ^{Bidassoa in 1813}

In October the French army under Soult was disposed as follows. On the right was Reille with about 10,000 men, half of whom were in occupation of the heights on the right bank of the river Bidassoa from the sea to the ford at Biriatu, while the remainder were engaged in entrenching the area to the west and south of St Jean de Luz. Clausel with 15,000 men was in the centre, holding the group of rugged mountains called Mandale and Bayonette and the Great Rhune Mountain; but a portion of his force was also helping the reserve, 8000 men under Villatte, to entrench the hills near Ascain and Serres. On the left D'Erlon with 15,000 troops was guarding the valleys at Ainhoa and Urdax, Foy with a detachment of 15,000 was engaged in throwing up entrenchments at St Jean Pied de Port, and Paris was marching from Oleron with 4000-5000 men.

The forces under Wellington stood in line opposite the French. Mina's Spaniards, 2000-3000 strong, were at Ahescoa; Hill with the 2nd and the Portuguese Division, in all about 15,000 men, held the pass of Roncevalles, the Alduides and the pass of Maya; the 6th Division, 7000 strong, was in the Bastan Valley, and the 3rd Division, some 6000 men, at Zagamurdi; the 7th Division, about 6000 men, was at Echalar; Giron with 8000 Spaniards was occupying Ivantelly; the Light Division, 6000 strong, held the Santa Barbara ridge; Longa's Spanish force of 5000 stood at the Salinas de Lesaca, and the 4th Division, 6000 men, was behind Longa. Freyre's Spanish Division, counting 11,000 men, lay about St Marcial, and the 1st and 5th Divisions with two unallotted brigades, 15,000 in all, formed the left of the army near Fuentarabia.

Wellington's right was standing on the easiest line of invasion into France, by St Jean Pied de Port and Maya, and it was consequently probable that the enemy would anticipate an advance from this direction. With the object, therefore, of attracting Soult's attention towards his left flank, and away from the line of the Bidassoa which was to be attacked, demonstrations were first made by the allied right.

The plan for forcing the Bidassoa was that while Hill stood fast the 6th Division was to feint in the direction of Urdax. At the same time Giron was to attack the Great Rhune, and the Light Division, in co-operation with Longa's Spaniards, was to assault the enemy's position on the Bayon-

ette Mountain, the 4th Division being retained as local reserve. Meanwhile Freyre and the 1st and 5th Divisions were to move down to the bank of the Bidassoa at Fuentarabia under cover of darkness, and at daybreak, when the tide would be low, were to ford the river and attack the French right.

On the night of the 6th/7th October advantage was taken of the additional concealment afforded by a heavy thunderstorm to pass the troops down to the Bidassoa; and at 7 a.m., on the 7th, the passage of the river was forced, the French right being completely surprised and driven back to the Nivelle. The allied centre also captured the Bayonette ridge, only 14,000 men in all being engaged on the French side.

On the 8th the Allies followed up their success, when the French were driven off the Great Rhune and obliged to retire to their entrenchments on the Nivelle.

Lord Gough's operations on the Chenab, during the Sikh War in 1848, show both how the passage over an obstacle can be won by means of a turning movement round the enemy's flank, and the risk of defeat in detail when following this plan. (Map on p. 236.)

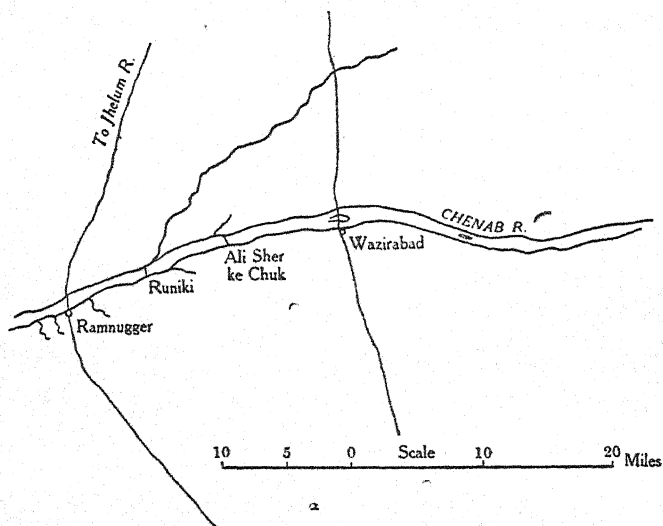
About the middle of November the British invaded Sikh territory with an army of 16,000 men, and advanced to the Chenab at Ramnugger Ford, where a Sikh force of about 25,000 men had collected.

On the 22nd Gough drove a detachment of Sikhs across the Chenab at Ramnugger, and encamped near it, spending several days in reconnoitring the river. Three other fords were found, one at Runiki, held by 4000 of the enemy, a second, which was deep and dangerous, at Ali Sher ke Chuk, and a third at Wazirabad, 22 miles above Ramnugger.

Gough now decided to contain the Sikhs at Ramnugger with part of his army, where the difficulty of crossing the river would act as a deterrent against an attack by the enemy. At the same time a detachment of about 8000 men was to be sent under General Thackwell to march northwards under cover of the Chenab, which was to be crossed on the 1st December at Runiki, if possible, otherwise at Ali Sher ke Chuk or at Wazirabad. Thackwell was then to advance down the Chenab against the flank of the Sikhs.

The ford at Runiki being too strongly guarded, Thackwell proceeded to Wazirabad, and crossed the river there without opposition on the night of the 1st/2nd and on the 2nd December. He then marched westwards, resting his left flank on the Chenab. Gough meanwhile cannonaded the Sikhs, to distract attention from the movements of Thackwell's column.

On the 3rd Thackwell continued to advance with the object of co-operating with Lord Gough in an attack on the enemy. The Sikh commander had, however, by this time discovered the presence of the outflanking force; and rejecting the



alternatives of an attack in force against either Gough or Thackwell while they were separated, he sent a detachment of 10,000 men to deal with the latter.

With these troops Thackwell fought an indecisive action, Gough remaining inactive at Ramnugger.

The spirits of the Sikhs were so affected by their lack of success on the 3rd, and by the menacing direction of Thackwell's advance, that during the night of the 3rd/4th they abandoned their position and withdrew to the Jhelum.

Maude's operations in Mesopotamia in 1917 followed much the same lines (p. 170); and Sir Redvers Buller adopted a similar plan when clearing Northern Natal of the Boers in 1900. (Map on p. 200.)

After the relief of Ladysmith the Boers had fallen back to the Biggarsberg, where a force of between 6000-7000¹⁹⁰⁰ men occupied an entrenched line extending from Cundyclough to Helpmakaar. The points where the Ladysmith-Newcastle road and the railway cross the mountains had been especially strengthened, and positions were prepared at Dundee which were to be held by the reserves.

Towards the middle of April the British forces in Natal were disposed as follows. 600 mounted troops under Colonel Bethune were at Pomeroy, the 5th Division, about 8000 strong, with the 3rd Mounted Brigade, some 1500 men, was holding a line from Elandslaagte to Jonono's Kop, while the 2nd Division, some 9000 men, and the 4th Division, also about 9000 strong, were in and near Ladysmith. The 2nd Cavalry Brigade, some 1200 sabres, was east and north-east of the town, and the 5th Cavalry Brigade, also about 1200 fighting men, watched the area to the west of it.

Buller now made arrangements for the security of Ladysmith, where the two cavalry brigades were retained, and also the 4th Division, composed largely of troops who, having garrisoned the town during the siege, were still hardly fit to take the field.

On the 10th May operations were commenced with the remainder of the army, the 2nd Division and the 3rd Mounted Brigade advancing on Helpmakaar, while the 5th Division moved along the railway by Wessels' Nek and Waschbank towards the Biggarsberg. The 5th Division halted on the next day, with the object both of containing such Boers as were in this locality, of deceiving the enemy as to the intentions of the British by menace of an attack, and of covering the movements of the 2nd Division. The latter continued to advance eastwards, and on the 13th, in co-operation with the Mounted Brigade and Bethune's force, drove the enemy from Helpmakaar; the Boers were pursued on the following day nearly to Dundee, and therefore lost the left flank of their positions on the Biggarsberg.

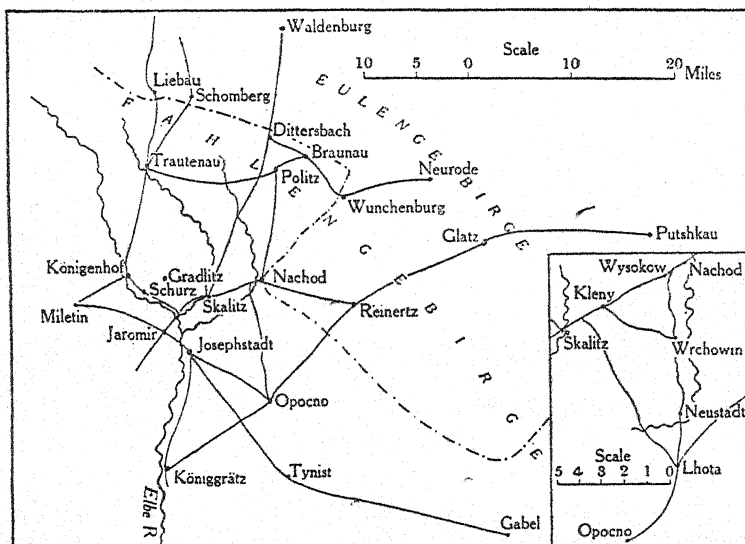
The result of this success was that on the 14th the Boers began to evacuate the Biggarsberg. On the 18th the 5th Division reached Hatting Spruit and Glencoe, and the 2nd Division Newcastle, the advanced troops being opposite Laing's Nek.

Prussians
in 1866

In the Austro-Prussian war of 1866 the 2nd Prussian Army successfully advanced into Bohemia through the Fahlen Gebirge on a wide frontage.

This formation was adopted with the object of rapidly passing the mountains, and concentrating beyond them, the enemy's advanced troops being attacked wherever encountered. Some risk was incurred of defeat in detail, but, as has been pointed out (p. 126), the danger was probably less than if the whole army had crossed this obstacle in one locality.

On the 25th June the 2nd Army was standing on the



frontier ready to advance, the 1st Corps being at Liebau and Schomberg, the Guard at Wunchenburg and Neurode, the 5th Corps between Reinertz and Glatz, the 6th Corps at Putshkau, and the Cavalry Division at Waldenburg.

It was the intention of the Crown Prince that the 1st Corps, followed by the cavalry, should march on Trautenau, the 5th and 6th Corps on Nachod, while the Guard, moving by Braunau, would be well placed to assist either wing in case of necessity.

On the 26th, while the 1st Corps remained stationary, the Guard crossed the frontier advancing to Dittersbach and Politz. At the same time the 5th Corps concentrated at Reinertz and the 6th at Glatz.

Meanwhile on the Austrian side the 6th Corps had, on the 26th, moved to Opocno, with an advanced guard towards Nachod; the 10th Corps was near Schurz, with a detachment in the direction of Trautenau; the 4th Corps stood in the vicinity of Könighof, while the 2nd Corps was near Gabel, the 8th Corps about Tynist, and the 3rd in the neighbourhood of Königgrätz.

In consequence of rumours as to the advance of the Prussians, Benedek, the Austrian commander-in-chief, now issued orders for the 6th Corps to march to Nachod, the 10th to Trautenau, the 4th to Jaromir, the 8th to Josephstadt, and the 3rd to Miletin.

As a result of these movements the two armies came into collision on the 27th June, when the 1st Prussian Corps was defeated by the 10th Austrian Corps and driven back to Liebau, although the 5th Prussian Corps gained a victory over the 6th Austrian Corps at Nachod.

On the next day the Guard routed the 10th Austrian Corps, which was surprised and taken in flank at Soor, two miles south of Trautenau; at the same time the 5th and 6th Prussian Corps were successful against the 6th and 8th Austrian Corps in an action at Skalitz. On the 29th the 5th and 6th Prussian Corps drove the 4th Austrian Corps out of Schweinschädel, a village about two miles west of Skalitz, and the 2nd Army concentrated on the line Könighof, Gradlitz and Skalitz.

DEFENCE AND ATTACK OF A COAST-LINE.

• The principles to be observed when a military force is defending or attacking a coast-line do not materially differ from those which govern operations for the defence or attack of the line of a river when the defender has taken up a position behind it.

The sea, as has been pointed out, may be considered as a large and unfordable river, liable to storms and unable to be bridged. It must therefore be crossed in ships and boats, from which disembarkation will be slow and precarious. On the other hand, when once embarked the attacking force as a whole can be moved by sea more rapidly and with greater secrecy than is possible on land, and facilities for feints and for surprise will consequently be greater.

It has been stated that when a commander proposes to defend an obstacle or obstacles lying at right angles to his line of operations, he will, unless able to hold the whole frontage in force, generally detail a portion of his army to watch the points of passage, with the object of ascertaining the movements and dispositions of the enemy. The main body will then be so placed that it can readily march against and overwhelm the enemy while engaged in crossing.

There can be little doubt that this is the best principle to follow when the defence of a coast-line is in question. Unless the forces available are such that all localities adapted for disembarkation can be so securely held that the attacker will have little prospect of success, the attempt to safeguard all localities must result in weakness everywhere. And when such dispositions are made the enemy should experience but little difficulty in effecting a landing in force whenever the naval situation is such as to justify the attempt.

As in forcing the passage over an obstacle, surprise is the chief factor, next to the control of the local maritime communications and the employment of adequate numbers, that makes for success when the object is to land in strength on the enemy's coast-line.

Surprise, as has been shown, should present less difficulty by sea than on land, since the invading troops are not, as in the case of an army moving on land, so closely tied to definite routes. Feints and false attacks can therefore be made with relative ease. And until the strength of the whole force which has been landed has actually been ascertained, the defender cannot, even with the help of aircraft, be sure whether the landing has been made as a feint, or by a detachment pushed forward to cover the disembarkation of the main body.

Thus in the Vimiero campaign of 1808 the French were uncertain until the landing had actually taken place near Coimbra whether the British would disembark on the north or the south of Lisbon. (Map 8 on p. 196.)

Next to surprise come complete arrangements for the rapid disembarkation of the troops and, as is shown by the invasion of the Crimea (p. 62), for their maintenance when ashore.

If the disembarkation is slow, or if the invader is obliged to delay owing to difficulties in regard to maintenance,

the enemy will be given time and opportunity to recover from his surprise, to concentrate his forces, to check the invader and perhaps even to defeat him in detail. This is demonstrated by the experience of the British expedition to the Helder (p. 108).

CONCLUSIONS.

The examples which have been given of the influence exercised on strategical operations by geographical features show that their effect, like that of most of the factors connected with the conduct of war, is in direct proportion to the skill of the commander, and the timing and execution of the movements, rather than to any inherent and absolute advantages or drawbacks. As has been well said, "the difference between a common general and a great captain is immense, the one is victorious when the other is defeated."

The presence of an obstacle, then, will often be turned to advantage by an able general, the obstacle being utilized for the purpose of placing the enemy in a difficult situation. When this is not possible, effective steps will be taken to modify the difficulties and drawbacks arising from the existence of the obstacle.

On the other hand, measures either to use or to discount an obstacle often prove ineffective when the leadership of an army is in the hands of a commander without ability, with the result that his forces are exposed to surprise and defeat in detail.

When the object is to force the passage over or through an obstacle, surprise, and the efficiency of the measures taken for its exploitation, are generally the most important factors in the achievement of success.

CHAPTER VII

THE INFLUENCE OF FORTRESSES.

FORTIFICATION is normally employed to economize force, to free troops for active operations, and to hamper the movements of the enemy. The principal function of fortresses and fortified lines is, therefore, to enable reductions to be made in the number of troops that must be employed for defence, and at the same time to force the enemy to detach proportionally larger numbers and to delay his operations.

As has been pointed out, the delay in the advance of the Germans caused by the French fortresses on the Moselle and Meuse, and the detachments made against those in northern France and Belgium contributed to the victory of the Marne in 1914; while Verdun, in 1916, resisted the prolonged and violent attacks of the Germans. Nevertheless it is generally agreed that fortresses did not exercise so great an influence in this war as had been anticipated. The art of fortification, in fact, had, prior to 1914, not kept pace with the improvements in the power and accuracy of siege artillery, and as a result Liège, Namur, Antwerp and Maubeuge held out only for a few days.

In spite of the comparative failure of the Belgian and French fortresses it soon became evident that the value of temporary field fortifications had by no means diminished, and that the importance formerly possessed by fortresses had devolved on systems of fortified lines. These were protected by obstacles of barbed wire which delayed the attacking troops; and, by enabling them to be held at close range under the full power of the fire of small arms, rendered the entrenchments impregnable until the wire had been shattered and the cover battered in by a bombardment of masses of artillery, or by tanks. It may, therefore, reasonably be expected that in the future fortified areas will be used for the attainment of the objects for which fortresses were made in the past. And it may be supposed that nations may again seek to supplement and economize the active forces required for the security of frontiers, capitals, arsenals, naval bases,

and other important areas, and to deny routes to the enemy, by means of fortified lines. These may consist of localities made strong with armour and concrete, and connected by a system of trenches, the whole being protected by mines, pits, wire and other obstacles against attack from land and air.

Undue reliance on fortifications can, however, in no circumstances be wise; for not only will their upkeep, improvement and garrisoning divert money and men from the navy, army and air force, but will imply lack of confidence in the active forces, the real defences of the nation.

Nevertheless, as pointed out by Napoleon, strong places are likely again to be "useful both in offensive and defensive war. Doubtless they cannot of themselves hold back an army, but they supply excellent means of delaying, embarrassing, weakening and disquieting a victorious force." And whatever the form of operation that is used against them, and whether they are attacked or merely blockaded, it is evident that, if they are efficiently organized, an invader will be obliged to divide his forces and expose them to defeat in detail; or to pause in his advance, giving the defender time to organize resistance.

It is a commonplace that fortified areas lying within a theatre of operations can be taken by main force, or by starvation, and that the method which is employed will depend on the necessity for their early capture and on their strength and position. It will, for instance, as a rule be necessary to attack places protecting river crossings or railway centres on the line of advance, localities containing important military forces, industrial areas the possession of which will be of advantage to the invader, or a naval base sheltering a fleet. If, however, the locality is not of immediate military importance, or if the early capture is not considered to be necessary, its investment will probably be undertaken; since the numbers required for effective investment, when once the place has been isolated, often need not exceed and may even be fewer than its garrison. It is most difficult for the troops holding a fortress to break through a strong line of investment; and it follows that it will generally be fatal for an army to take refuge in a fortress or fortified area, and that this should be avoided if possible. Further, the obligation to undertake the relief of a force that

Steps
taken for
capture of
fortresses

Disad-
vantage
of taking
refuge in
a fortress

is so situated can hardly fail to hamper the operations and affect disadvantageously the strategy of the remainder of the field armies. In 1870, for instance, the French army under McMahon was defeated and forced to surrender while attempting to relieve the army under Bazaine which had been invested by the Germans in Metz, and was eventually obliged to capitulate. The investment of the British force under White in Ladysmith induced Buller, in 1899, to abandon his original plan of campaign and attempt its relief. In 1916 considerable British forces were hurried to Mesopotamia for the relief of Kut-el-Amara, and the straits of the garrison caused premature and ineffectual attempts to be made for its assistance.

Should a fortress or fortified area which, like Vladivostok in the Russo-Japanese war, is outside the theatre of active operations be of military importance only because of the presence of its garrison, the latter may be watched by a comparatively small force; for part of the garrison of a place is necessarily tied to the fortifications.

Delay
caused by
fortresses

The following are instances of delay caused by the presence of fortresses or fortified areas; and also of the detachment of forces to effect their capture. In 1796-97 Napoleon was obliged to suspend his forward movement and undertake the siege of Mantua, which was too large to be invested by a detachment from his army, and was so placed that it could not be ignored. This delay allowed the Austrians to gather large forces and on three separate occasions to assume the initiative and attack the French (p. 145). In 1813 Wellington paused in his advance after the victory of Vittoria and laid siege to St Sebastian, in order to obtain a harbour suitable as a sea base for the British. He also invested Pampeluna which lay on an important road from France that could be used by the enemy for incursions into Spain. (Map 8 on p. 196.) Soult was consequently able to reorganize the French army and to assume the offensive. Their investment of the British force in Ladysmith caused the Boers to suspend their advance into Natal, in 1899, and the British were given time to collect forces for the protection of the colony. In 1916 the Turks contented themselves with the investment and capture of the British troops at Kut-el-Amara; and again the British

were given time to bring to Mesopotamia forces not only sufficient to secure the Karun oilfields and Basra, but eventually to defeat the enemy and capture Baghdad. (Map on p. 171.)

In 1814 Wellington was obliged to leave 28,000 men out of his total force of 100,000 to besiege the French garrison of about 10,000 men holding Bayonne, which lay on his line of communication; and this detachment was one of the factors which enabled Soult to continue his campaign in the south of France. (Map 10 on p. 226.) The siege of Sebastopol, which was attacked because it was the naval base of the Russian Black Sea Fleet, absorbed so large a proportion of the forces of the Allies in 1854 that few troops were available for other operations. When attacked by the Russian field army the Allies were consequently in danger of defeat in detail (p. 92).

The Germans detached a force of about 200,000 men, in 1870-71, to undertake the investment and capture of Metz, which covered important road and railway crossings over the Meuse, and was also occupied by a French army of 175,000 men under Marshal Bazaine.

In 1914 the Germans had counted on the rapid reduction of the fortresses in Belgium and northern France; and although these did not hold out for any length of time, the delay of about ten days, caused by the necessity for their reduction, gained time for the development of the French forces which eventually turned the scale in the battle of the Marne, fought on the 6th-10th September. The Germans were also prevented from using the important railways and roads which passed through the fortresses. Further, the German 10th Corps detached against Liège, a reserve corps at Namur, the 24th Division at Givet, and portions of the 7th Reserve Corps at Maubeuge were not available for effective employment in the battle of the Marne; and the resistance of these places was, therefore, a not inconsiderable factor in the defeat of the Germans. (Map 12 on p. 252.)

A force of about an army corps was also detached to watch the Belgian army, which had fallen back to the fortress of Antwerp and could, therefore, menace the communications of the German armies in Belgium. By a vigorous sally on the 10th September the Belgians were able to drive

the enemy out of Malines and Aerschot, and to interrupt the railways between Louvain and Tirlemont. As a result the Germans were constrained to divert from their armies in France reinforcements, estimated at an army corps, before the Belgians were again driven behind the fortifications.

In 1915, before advancing to the Carpathians, the Russians were obliged to detach a force of 100,000 men to invest Przemyśl, a fortress on the river San and railway from Lemberg to Cracow. (Map 2.) Przemyśl held out for seven months; but in this case the siege was not pressed, and the garrison amounting to about 150,000 was larger than the investing force.

On the other hand in 1813 and 1814 the Allies as a rule merely watched with troops of the second line the French garrisons left in various fortresses in Germany, the Low Countries and France, and too distant from the theatre of war in Saxony and then in Champagne directly to affect operations. (Map 2.)

Fortresses
badly
defended

A well placed and well defended fortress may, therefore, exercise an important influence in a campaign; but a fortress feebly defended, or one controlled by an unenterprising commander, is worse than useless. In the first case the garrison will fall into the hands of the enemy without having exacted an adequate expenditure of force, and the fortress can be turned to the enemy's advantage; in the second, the presence of the garrison will have little or no effect on the course of the operations.

In 1806, for instance, after the battle of Jena the majority of the Prussian fortresses surrendered on mere summons by the French (p. 59). In 1815, also, after the defeat of the main French army at Waterloo, the frontier fortresses in no way delayed the advance of the Allies on Paris (p. 129).

After the retreat of the Allies in 1914 from the Franco-Belgian frontier the fortresses of Mézières, Montmedy and Longwy held out only for a few days; and though, as has been pointed out, the garrisons of Maubeuge, Givet and Antwerp did useful work, the first fell in a week and the last was evacuated after being held for nearly seven weeks, but was besieged for twelve days only, from the 28th September to the 9th October, 1914.

The fact, then, as observed by Napoleon, is that—
“Fortresses, like guns, are useless as such. Their value lies in their able and intelligent employment.”

PURSUIT.

“Victory,” said Napoleon, “is nothing: one must exploit success.” And again—“The secret of war is to march twelve leagues¹, fight a battle, and march twelve more in pursuit.” It was in this manner that his success was gained and improved in the Jena campaign (p. 58).

Victorious troops, however, and particularly after a hard-fought battle, are often exhausted, disorganized and unnerved, and therefore unwilling to face further danger; and this will especially be the case when, owing to the difficulty of bringing up heavy guns, adequate artillery support in overcoming the enemy's further resistance may not be forthcoming. The troops will also probably be short of ammunition, and of the food required to enable fresh exertion to be readily undertaken.

This may account for the fact that although effective pursuit is necessary for the completion of victory in all cases when the enemy has not been surrounded, it has been of comparatively rare occurrence.

The exact nature of a pursuit, the detachments that can be made, and the risks that may be taken, are primarily determined by the extent of the victory; they are also affected by factors in the general strategic situation, such as the presence of other hostile forces, their size and proximity, and the time available to exploit success.

DIRECT PURSUIT.

To follow in the tracks of a beaten army, or of an army which is falling back to avoid an action, is rarely productive of great consequences, even when the enemy is disorganized or has for the moment been driven from his line of communication. Covered as a rule by rear guards, and probably unencumbered by baggage, a defeated army should be able to out-march direct pursuit; and will certainly find it possible to do so when retiring on magazines and dépôts, for supply

¹ A league is 3·6 miles.

difficulties alone will generally suffice to delay the movements of the enemy.

Wellington in 1811

This is shown by the results of Wellington's pursuit of the French under Masséna in 1811, and by those of the pursuit carried out by the Germans in 1914.

In November 1810 lack of supplies had forced Masséna to abandon his position in front of the lines of Torres Vedras and to fall back to the vicinity of Santarem, where a line of defences had been prepared. These were occupied as follows. Santarem was held by the 2nd French Corps, 12,000 strong; the 8th Corps, 11,000 men, stood in the neighbourhood of Alcanhede and Torres Novas; of the 6th Corps, 18,000 strong, two divisions were at Golegao and Thomar, and one division at Punhete and along the Zézere; and the reserve cavalry, 3000 sabres, lay at Chao de Macas. (Map on p. 251.)

Of Wellington's army the cavalry, 3000 sabres, watched a semicircular line from Muge on the Tagus to Ribeira on the Rio Major. Behind the cavalry the Light Division, about 4500 men, was at Valle, near Santarem; and Pack's Portuguese brigade, 2000 strong, was at Almoester. The 1st Division, 7000 men, was at Cartaxo; the 4th, about 6500 men, at and near Azambuja; the 3rd, 6000 strong, at Alcoentre; the 5th, 5500 men, at Torres Vedras; the 6th, some 6000 men, at Alemquar; and Le Cor's Portuguese division at Alhandra. Besides these troops 10,000 men were south of the Tagus, Peniche on the sea coast was garrisoned, and Trant and Wilson with 5000-6000 Portuguese militia were behind the French in the neighbourhood of Coimbra on the Mondego, and Espinal.

At the end of December Masséna received a reinforcement of a detachment of about 8000 men of the 9th Corps under D'Erlon, but their arrival did little more than increase the great difficulties of the French, who were living on the country, in regard to supply.

The French, however, were able to maintain themselves until the beginning of March 1811, when Masséna, who could no longer obtain food, and had but little ammunition, resolved to retreat.

The retirement began on the 4th, over a rugged mountainous district, as many roads being used as possible with

a view of expediting the movements of the army. The men of the 9th Corps, followed by the 6th Corps and reserve cavalry, consequently marched by Leiria and Pombal; the 8th Corps moved by Chao de Macas on Pombal; and the 2nd Corps fell back through Thomar, Cabacos and Espinal.

Towards the beginning of March Wellington had begun to concentrate his troops with the object of attacking the French; and although he ascertained on the 6th that they were definitely in retreat, it was not until the 9th that the pursuit was taken up, when definite information had been obtained as to the routes by which the enemy was retiring.

It was now decided that the 3rd, 5th and Light Divisions, with a Portuguese and a cavalry brigade, were to pursue the enemy's main column marching by Leiria; the 1st, 4th and 6th Divisions, with a cavalry brigade, were to move by Thomar and Chao de Macas on Pombal; but one brigade of the 1st Division was to follow the French 2nd Corps towards Espinal.

On the 11th the Light Division came on the rear guard of Ney's 6th Corps at Pombal, where a skirmish took place. Next day Ney was found in position at Redinha, where the French fought a rear-guard action against the 3rd, 4th and Light Divisions.

Meanwhile, although only a weak force of Portuguese was actually in position at Coimbra, the French cavalry had reported that the place was held by the Portuguese in strength. In these circumstances Masséna decided to use the roads running south of the Mondego on Celorico, where the detachment of the 9th Corps had been sent on the 12th for the purpose of watching the route from Castello Branco. The 8th Corps consequently marched with the baggage on Miranda de Corvo; Ney remaining with the 6th Corps at Condeixa and Rabaçal to cover the movement, while the 2nd Corps halted at Espinal for the same purpose.

On the 13th Wellington manœuvred the 6th corps out of Condeixa, and the next day the 3rd and Light Divisions had a sharp skirmish with the French rear guard at Casal Novo.

On the 14th Masséna, who had concentrated the 2nd, 6th and 8th Corps near Miranda de Corvo, finding his movements hampered by the wheeled vehicles, burnt all with the exception

of a few ammunition wagons, and destroyed all baggage which could not be carried on pack animals. The army then made a night march over a difficult pass, crossing the Ceira at the village of Foz de Aronce. The 6th Corps again acted as rear guard.

Wellington's advanced troops, the 3rd and Light Divisions, did not regain touch with the enemy until the evening of the 15th, when a short action was fought at Foz de Aronce.

Early on the 16th, covered by a rear guard of the 6th Corps under Ney, the French continued their retreat to Ponte Murcella, where the bridge had been broken by the Portuguese. This was repaired, and on the 17th the French army crossed and took up a position behind the Alva, the 6th and 8th Corps at Ponte Murcella, with the cavalry reserve on their right, the 2nd Corps at and near Sarzedo.

Meanwhile Wellington had halted on the 16th, feeling confident that there was no longer danger of an offensive by Masséna. Since a newly formed 7th Division was on its way to join the army from Lisbon, he now felt able to detach the 4th Division and a cavalry brigade, nearly 7000 men, to reinforce the troops who were opposing the French in the area south of the Tagus.

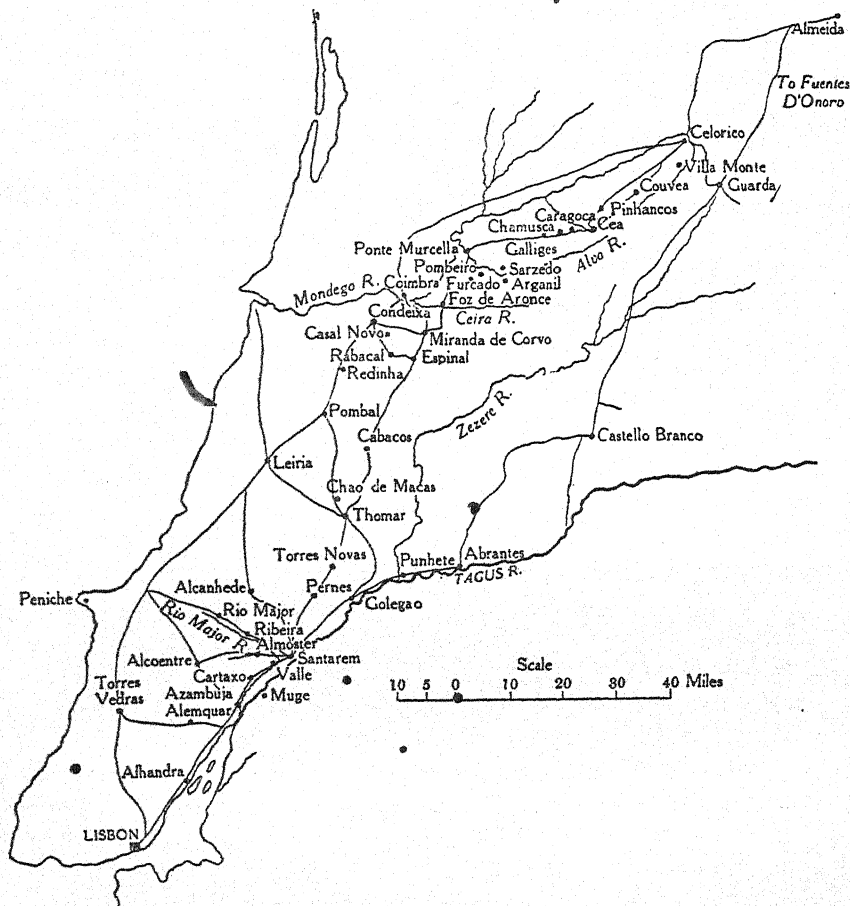
On the 17th the Allies again obtained contact with the French, the 2nd and Light Divisions and two cavalry brigades moving on Ponte Murcella, while the 1st, 3rd and 5th Divisions, and two Portuguese brigades advanced from Furcado on Arganil, thus menacing the French line of retreat. Masséna therefore drew back the 8th Corps to Galliges.

A portion of the 1st British Division crossed the Alva on the 18th near Pombeiro; the remainder of the French then fell back to Galliges, and during the night of the 18th/19th again made a night march, the head of the 8th Corps reaching Pinhancos on the 19th, that of the 2nd Corps Caragoça, and that of the 6th Chamusca.

Wellington crossed the Alva on the 20th, when the Light Division and 3rd and 6th Divisions pushed on to Galliges, the cavalry coming up with the French in the evening near Cea.

The French army was now split up into two columns, the

8th and 6th Corps marching direct on Celorico, while the 2nd Corps moved by Cea to Couvea, and then by Villa Monte on Guarda. The troops were not seriously pressed, the leading British divisions being now nearly a day's march from the rear guard. On the 22nd, therefore, the 6th and 8th Corps



concentrated at Celorico, which was held by a division of the 9th Corps, and the 2nd Corps reached Guarda, which had also been occupied by the detached division of the 9th Corps.

On 5th May Masséna was able to attack Wellington (who meanwhile had invested the fortress of Almeida), and was only defeated after a hard-fought battle at Fuentès D'Onoro.

British
in 1914

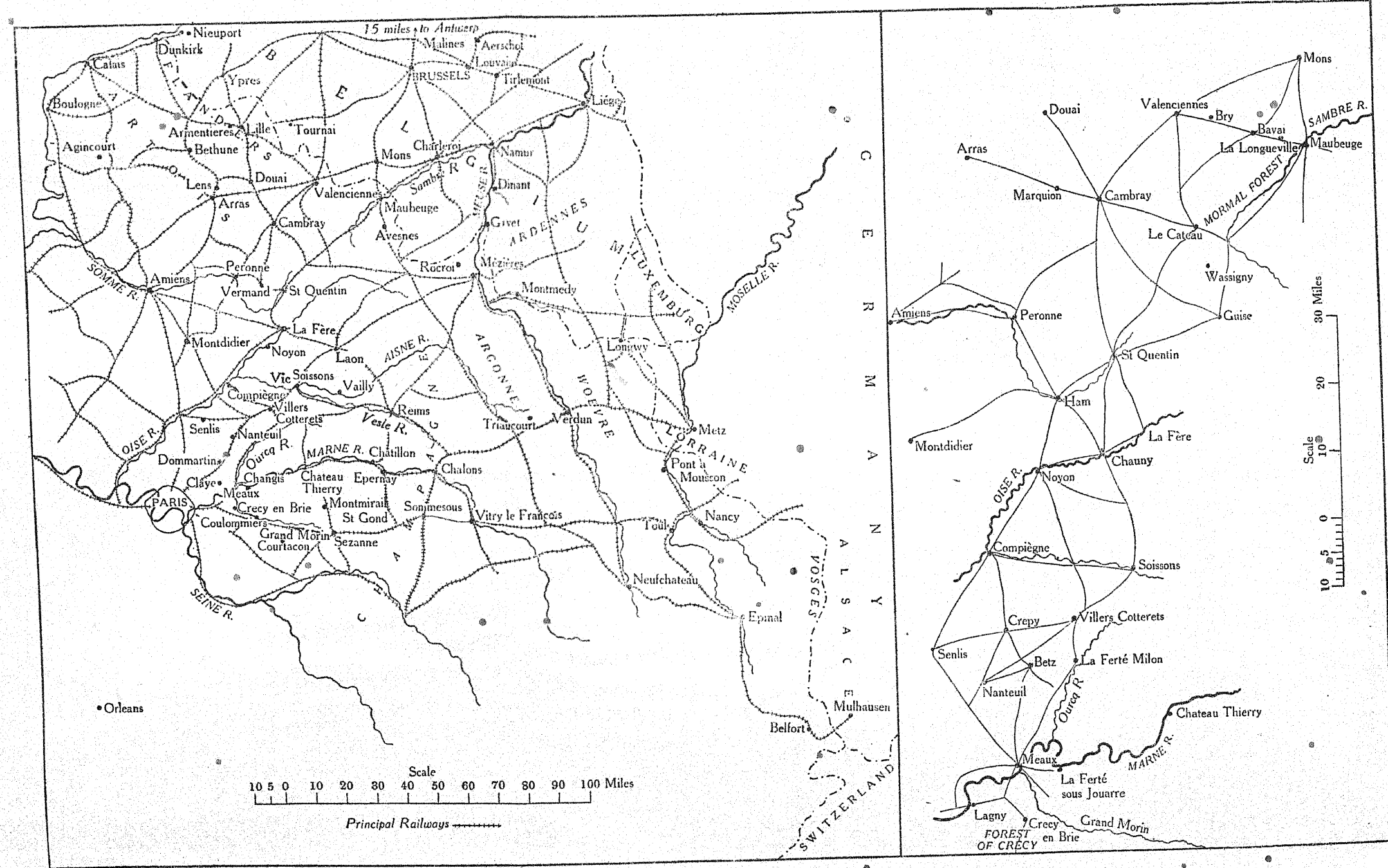
* The pursuit of the British Expeditionary Force from Mons to the Marne in 1914 supplies a further example of a direct pursuit. At the commencement of the pursuit the general situation was as follows. On the 24th August the French 5th Army had been driven south of the Sambre in the area between Namur and Charleroi. The British force of one cavalry division, and two corps each of two infantry divisions¹, had been attacked at Mons by the bulk of the German 1st Army consisting of three larger corps and one cavalry division; and a fourth German corps and a cavalry division were carrying out an enveloping movement via Tournai, which could be opposed only by French reserve formations. (Map 12.)

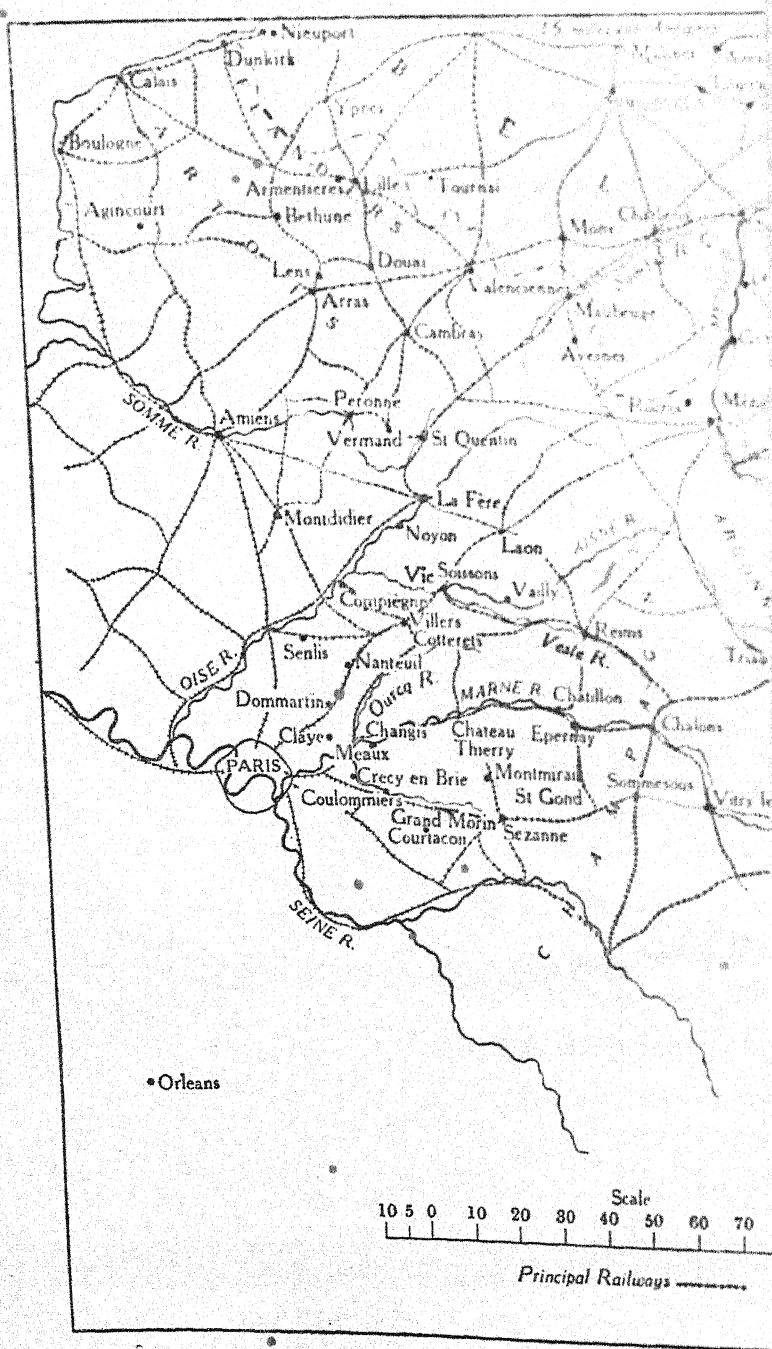
As the road through Maubeuge was required for the French the British were ordered to fall back to a line from La Longueville through Bavai westwards. This was accomplished with but little fighting except on the left flank, where the troops were obliged to withdraw in a south-easterly direction, and changed positions with those which had been on their right. The Expeditionary Force eventually halted on the line Maubeuge—Bavai—Bry. On its right the French 5th Army was being pushed in a westerly direction; on the left there were the French reserve troops amounting to two divisions, and now also a French cavalry corps.

The retreat of the British was continued on the 25th, and owing to the presence of the forest of Mormal the two corps became somewhat separated. The Germans therefore seized the opportunity of closing on the 2nd Corps; and although it was joined by a third division from England just before the action, the corps was attacked and driven from Le Cateau, on the 26th. Meanwhile the 1st Corps retired under pressure of the enemy to the neighbourhood of Wassigny.

After a very brief period of rest on the night of the 26th–27th the British 2nd Corps continued its retreat in a southerly direction without being seriously pressed by the enemy's 1st Army, which seems now to have moved westwards; and marching almost without halting, day and night, the troops arrived in the vicinity of Noyon on the evening of the 28th. On this date the British 1st Corps, after a few minor actions with the German 2nd Army, had reached

¹ An infantry division comprised about 15,000 fighting men at this period.





the area La Fère—Chauny. Meanwhile on the 28th the force of two French divisions and a cavalry corps had engaged the German 1st Army near Péronne on the left of the British, and the French 5th Army had in its retirement somewhat overlapped their right. Reinforcements, however, withdrawn from the French armies in Lorraine were being sent northwards to Amiens to form the basis of a 6th Army. On the 29th the British remained generally at rest, but the French 5th Army attacked the enemy's 2nd Army gaining a local success at Guise. On the other hand two corps of the German 1st Army drove back the French from the neighbourhood of Amiens and Péronne, and also from the Somme below Ham.

The retreat of the British continued on the 30th and 31st with but little hindrance from the German 2nd Army, which had taken up the pursuit; and it was now noticed that the troops of the German 1st Army had ceased to move westwards and were wheeling to their left along the frontage from Noyon to Compiègne. On the 31st the British were on a line extending from the south-west of Soissons by Villers Cotterets past Crepy, and on the 1st the force, which was now organized as three corps, was reunited on the line La Ferté Milon—Betz—Nanteuil, while the right of the newly formed French 6th Army was at Senlis. The German 1st Army had by this time reached the area lying to the south of Compiègne. On the 3rd the British had withdrawn across the Marne to the line La Ferté sous Jouarre to Lagny, and the 6th French Army to the northern defences of Paris.

Serious pressure against the British had now ceased and it had become evident that the bulk of the German 1st Army was moving across the British front to Château Thierry, where the French 5th Army had been attacked and forced back on the 2nd September. The retreat of the British was nevertheless renewed in order to induce the Germans to continue their false movement; and on the 5th, after a night march, the force was standing on a line behind the Grand Morin and to the south of the forest of Crécy, the troops having covered nearly 200 miles in thirteen days, besides fighting some considerable actions. The next day the British force advanced in co-operation with the French 6th Army which was moving towards the Ourcq, and assisted in defeating the Germans at the battle of the Marne.

ENVELOPING PURSUIT.

It is a maxim, then, that enveloping movements should be combined with direct pursuit—that is, lightly equipped units should be pushed forward past the enemy's flanks to seize defiles, bridges, road and railway junctions, and to delay his march; and aircraft should be used to destroy roads, railways and bridges and to harass the troops. If these duties are successfully accomplished, the main body of the pursuers may be able to close on the retreating army, and effect its capture or that of large portions; or at any rate oblige the commander to abandon guns and baggage and therefore greatly reduce the fighting power of the force.

Wellington in 1809

Wellington's pursuit of Soult in 1809 in the mountainous area lying to the north of Oporto is an example of an enveloping combined with a direct pursuit.

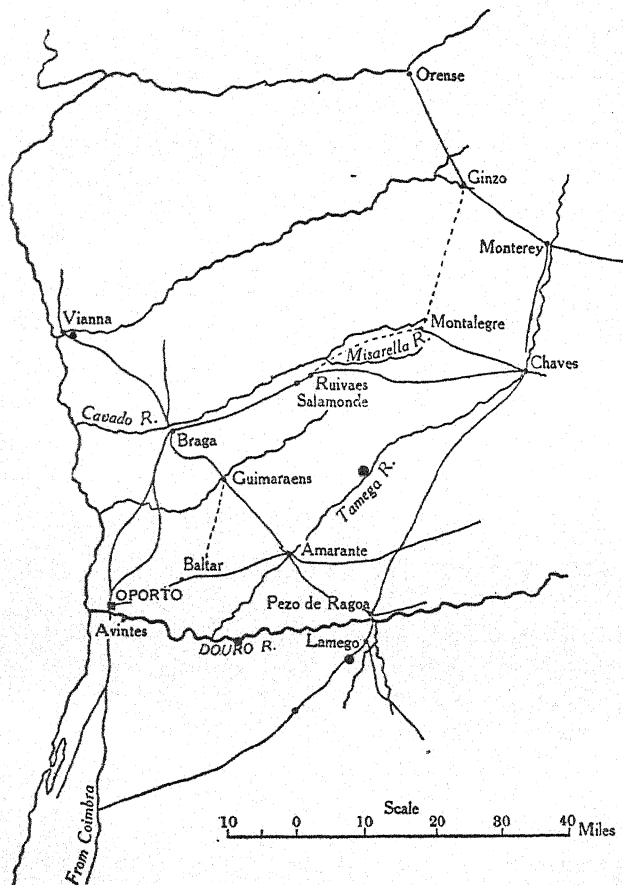
After the capture of Oporto, in March, 1809, Soult placed some 10,000 men in and round this city; 1000 cavalry and a few infantry were left at Braga and Vianna to watch the approaches from the north; a detachment of 5000 was pushed southwards towards Coimbra; and 7000 men were sent under Loison to Amarante to deal with a Portuguese force operating in this neighbourhood under Silveira.

Early in May Wellington advanced northwards against the French in two columns, the main body of 20,000 Anglo-Portuguese moving on Oporto. Beresford with 6000 men was first sent to Lamego, which lay near the enemy's easiest line of communications with the French forces guarding the roads from Madrid to France. Here he was to be joined by Silveira with 4000 Portuguese, and also by a small force of 2000 Portuguese under Sir R. Wilson; and after leaving Lamego his actions were to be dependent on the movements of the enemy and on the success or failure of the main body of the Allies.

Having driven in Soult's advanced troops, Wellington surprised the passage of the Douro on the 12th May, causing Soult to retreat hastily to the neighbourhood of Baltar, where 13,000 men were collected. The French rear guard narrowly escaped interception by a British force of 1500 men sent, under Murray, across the Douro at Avintes.

Early on the 13th Soult learnt that Loison, who had been directed to clear a road for the retreat of the French eastwards through Amarante, had, on the 12th, retired on Guimaraens and Braga under pressure of Beresford's detachment.

Placed in a very difficult position Soult now resolved to destroy the artillery, and abandon the baggage of his army,



and effect his escape by means of a mule track which led across the mountains to Guimaraens.

After a most trying march this place was reached in the evening, and here on the 14th Loison rejoined the army, raising its numbers to about 20,000. The slackness of the direct pursuit of the Allies now caused Soult to suspect that an attempt would be made to intercept the French at Braga,

and he therefore resolved again to cut across country. Accordingly after destroying the guns and baggage of the troops with Loison, the army plunged into the mountains, reaching the Braga-Chaves road on the evening of the 14th, a few miles to the east of Braga.

Meanwhile, owing to the fatigue of his troops, Wellington had been obliged to halt at Oporto until the 14th, Murray's detachment alone following the enemy. On the 13th news came in that Soult had taken to the mountains; and directing Murray to follow up the French, and Beresford, who had already anticipated these orders, to seize Chaves and Ruivães, Wellington pushed on the 14th to Braga. Here, early on the 15th, the vanguard came into contact with some of Soult's cavalry.

Soult now moved rapidly towards Chaves, but on reaching Salamonde found the bridge there had been partially destroyed and the passage barred by a body of Portuguese militia. These were surprised after nightfall, and the bridge was seized and so far repaired that on the 16th the French were able to cross it; although the rear guard was hard pressed by Wellington's advanced troops. Fearing to be headed off by the Allies at Chaves, which actually had been occupied by Beresford, Soult now turned north-eastwards to Montalegre, and again found his retreat intercepted, the bridge over a deep ravine, known as the Misarella, having been occupied by Portuguese militia.

These were rushed out of the position by two battalions charging in fours, and the French made good their escape, though not without considerable loss to the rear guard, which was attacked by the British. Ruivães was occupied by the main body under Wellington on the 17th, Silveira, who had been ordered there on the 14th, only arriving late in the evening. Next day Silveira was sent after the French, and Beresford to Monterey and Ginzo; but when it was found that Soult's force had passed through Montalegre and reached Orense the pursuit was abandoned. Soult did not take the field again against Wellington until the end of July (p. 182).

When direct pursuit is combined with enveloping pursuit it is of especial importance that the main body should

closely press and follow the enemy, who otherwise will have time to attack and rout the detachments sent on to anticipate him. This is proved by the escape of Soult in 1809, and also by the experience of the French after their victory at Dresden in 1813.

In August 1813 an allied army of 126,000 Austrians, 65,000 Russians, and 50,000 Prussians invaded Saxony from Bohemia; and advancing in four columns moved from the west, south-west and south on Dresden, which was occupied by the French garrison of about 30,000 men under St Cyr. (Map 13 on p. 260.) Dresden
in 1813

Napoleon, whose main army was then in Silesia, at once hurried back to the assistance of St Cyr, bringing up the Old and Young Guard, some 50,000 men, and the corps of Marmont and Victor, each about 30,000 strong, together with about 15,000 cavalry. At the same time Vandamme's corps, 30,000 strong, was sent to a bridgehead established at Königstein, with the object of menacing the communications of the Allies.

Having detached 17,000 Russians under Osterman to contain Vandamme, the Allies attacked Dresden; and after a two days' battle were defeated on the 27th August, the French overwhelming the left wing of the allied army. At the same time Vandamme drove in the Russians, who fell back towards Peterswalde.

The Allies now decided to retreat, and withdrew on the 28th. The bulk of the Russians and Prussians at first fell back along the Berggieshübel-Peterswalde road, but later, for fear of interception by Vandamme, crossed over to the Maxen-Fürstenwalde road. The main body of the Austrians marched by Dippoldeswalde and Altenberg, and a detachment was sent round by Freiberg and Marienberg on Kom-matau.

Although Napoleon was directing the operations the French did not press the pursuit. Murat with the cavalry and Victor's corps advanced on Freiberg, and Marmont's corps on Altenberg. St Cyr followed the Russians and Prussians by Dohna; and the Guard moved via Pirna on Berggieshübel to support Vandamme, who was pushing Osterman back along the Peterswalde road.

In the afternoon of the 28th Vandamme, whose force was increased to about 40,000, was ordered to march on Toplitz, Aussig and Tetschen, so as to gain the enemy's line of retreat with the object of intercepting his baggage and supply trains. Vandamme was to be supported by the Young Guard, if necessary, while Marmont and St Cyr were to continue the direct pursuit. Having issued these instructions, Napoleon returned to Dresden.

On the 29th Vandamme alone advanced with energy and attacked Osterman at Priesten; on being reinforced towards evening the Russians were able to hold their ground. Of the remainder of the French army the Guard remained at Pirna; and the other corps merely followed the retreating columns of the Allies, who finally halted, the Austrians in the neighbourhood of Dux, the main body of the Russians near Altenberg, and the Prussians near Fürstenwalde.

On the 20th, in the absence of the Emperor, the French pursuit was again lacking in vigour. Early in the morning a large allied force of some 70,000 in all was therefore able to take the offensive against Vandamme, who was forced back to Culm. The leading troops of Kleist's Prussian corps now came in upon the rear of Vandamme's force, and against such superior numbers the French could effect nothing. As a result about half of Vandamme's detachment was killed or captured, and the whole of its 50 guns were lost. On the news of this disaster the pursuit ceased.

RETREATS.

There is a considerable difference of opinion as to whether an army which is retreating after a defeat should separate or concentrate.

The natural tendency of beaten men is to scatter for safety, with a view of again uniting when the enemy's pursuit has slackened.

On the other hand, it is held that an army which has been defeated should not allow the enemy a further advantage by voluntarily disintegrating; and that in no case should he be allowed to dictate the line of retreat.

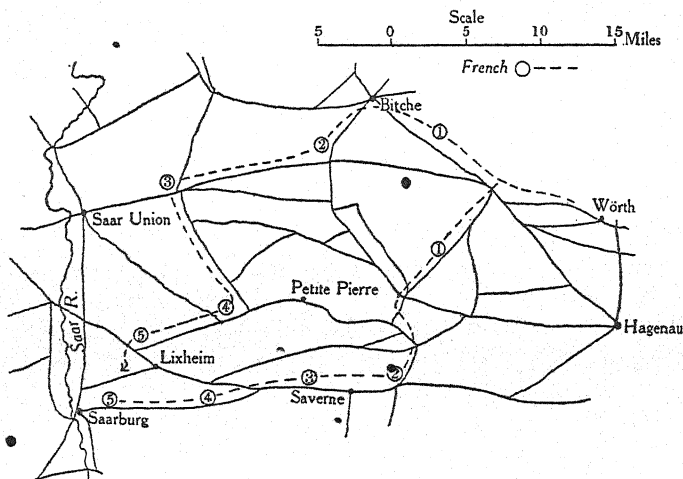
Of this contention it may be said that if an army holds together the troops will no doubt be better able to make head against the enemy and probably also to arrange for

their own maintenance; but the movements of the army will necessarily be slow, and the whole or at any rate a large proportion will be liable to envelopment should the enemy succeed in anticipating it at some defile such as the crossings over a river.

Probably the extent of the defeat will dictate the policy to be adopted after an unsuccessful battle.

When a force has been severely beaten the safety of its components is the first consideration, and they must retire as best they may.

Thus after the battle of Wörth, in 1870, the French retreated in two directions, on Bitche and Saverne, the two masses rejoining one another five days later when it was found that the Germans were not pursuing with energy.



After the successful attack of the British forces on the Turkish positions at Beersheba and Ghaza in November, 1917, the Turkish army of nine infantry divisions and one cavalry division, or about 50,000 fighting men, also fell back in two bodies, the main force along the railway lines, and a detachment on Hebron. (Map 6 on p. 144.)

On the 12th November a body of Turks, 20,000 strong, rallied and occupied an extended position from Beit Jebrin to El Kubeibeh, covering the junction on the Jerusalem—Damascus railway.

On the 13th this position was attacked, and the British

captured the junction early on the 14th, thus again breaking the Turkish force into two parts, one of which withdrew on Jerusalem while the other retired northwards.

The British were now obliged to halt to await the progress of their railway construction. It was not until the 19th that the advance could be resumed, by which time the Turks had been able to take up positions north-west of Jerusalem and north of the Auja, and here the pursuit ceased.

After their defeat at Kut-el-Amara in 1917 the Turks retired in one mass until they crossed the Dialah, when they split up into two groups (p. 59).

If the troops have merely been driven back, they will naturally make as orderly a retirement as possible.

Liao Yang
in 1904

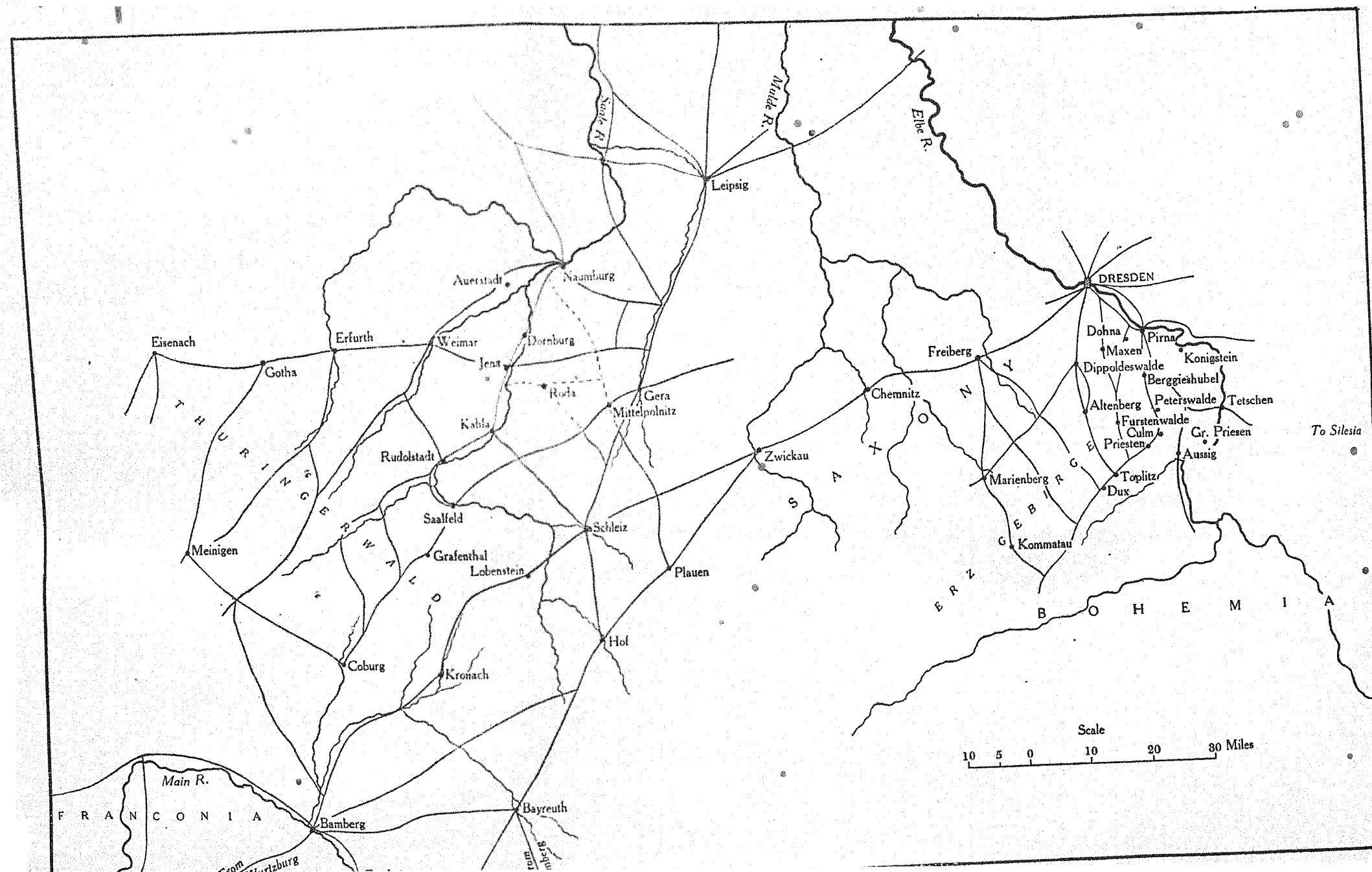
After the battle of Liao Yang in Manchuria, in 1904, the Russians fell back in solid masses and in good order; the Japanese consequently abandoned the pursuit after following for a few miles.

When a battle has not been lost, retreat should be undertaken only in the last resort. This will be necessary, for instance, when the enemy has manœuvred in such a manner that the army must retreat or accept battle in disadvantageous circumstances. Or when a procrastinating policy is to be adopted and the enemy's army is to be drawn forward until the waste of war due to prolonged marching, and the necessity for detachments to secure the line of communications, have so reduced its fighting force that an engagement may be risked with reasonable prospect of success. Again, retreat will be justifiable when the enemy is greatly superior in strength, or when falling back on reinforcements, or owing to difficulties in regard to supplies.

Setting aside the inevitable loss of *moral*, retirements of any duration, no matter how skilfully conducted, are often as destructive of men and material as the bloodiest and most indecisive battles; and in a retreat the heaviest losses always fall on the side which is falling back.

Retire-
ments ex-
emplified

In the retreat to Corunna before the greatly superior forces of the French in 1809, Moore lost 25 per cent. of his force, and the remainder were so sickly that they could not again take the field for a considerable period.



Soult's retreat from Oporto is an example of a retirement with the object of avoiding battle in unfavourable circumstances (p. 254). Wellington also retired across the Tagus to avoid a battle later in the same campaign (p. 183).

In 1650 Leslie deliberately fell back with the object of drawing Cromwell into Scotland; and during this campaign Cromwell was more than once obliged to retire for want of supplies (p. 154).

The campaign of 1810-1811 in Portugal also illustrates a retirement made with the object of drawing on and weakening the enemy; and Masséna's subsequent retreat was made owing to want of provisions (pp. 97 and 248).

In the Salamanca campaign Marmont first retired over the Douro, and having received reinforcements, took the offensive against Wellington (p. 162).

In 1914 the British retreated before the superior forces of the Germans, and then assumed the offensive in conjunction with the French at the battle of the Marne (p. 252).

DETACHMENTS.

A detachment in strategical operations on land may be defined as a body of troops withheld or removed from the main army for a specific purpose.

In the course of the King's Speech in Parliament in December, 1756, at the end of the first year of the Seven Years' War, the elder Pitt stated the general case in favour of detachments when he proclaimed* that the war in America, which was the main object of England's attention, was to be seconded by the subordinate measures by which all great operations must be buttressed. There are few campaigns of which the same is not true; and it may therefore almost be claimed that the history of the higher direction of war is that of one long struggle between the principle of concentration of force and the powerful interests that make for its dissipation; and that success or failure has usually depended on the maintenance of a just balance between these conflicting requirements.

The successful attainment of the object for which a detachment is made certainly depends more on the manner in which it is handled than perhaps does any other operation of war. The commander of the detachment is,

in fact, entrusted with a most delicate mission, and one whose successful fulfilment usually demands qualities far above the ordinary. He must be self-reliant and subordinate, must act in accordance with the spirit of his instructions yet never be afraid in case of necessity to deviate from the letter; he must be ready always to sacrifice himself and his force to the attainment of the object of the government or commander-in-chief, but at the same time must avoid decisive action unless this is essential.

The strength and mobility of a detachment should clearly be regulated by the object with which it is made. The strength of our own and of the enemy's forces; the time available for the attainment of the object; the distance from the main body at which the operations will be conducted; the space available for manœuvre; the facilities for maintenance and the topography of the area, are all factors to be taken into consideration. Naturally the smallest force will be detailed that is compatible with the achievement of the purpose for which the detachment is to be made, since any detachment of troops involves the weakening of the main body; but the force will be wasted if not fully adequate to attain the end which is proposed.

It is evident, then, that in practice it will be far from easy to determine the size of a detachment, and to fix definite limits to its magnitude. Unwillingness for political reasons to abandon the purpose for which it was made; the difficulty of restricting the scope of the operations; hesitation to accept the risk of defeat which must be incurred in all operations; or the necessity of repairing disaster, will form strong arguments for additions to and not reductions from a detachment.

Before making a detachment a government, or general, should therefore consider whether the effect likely to be produced by its action will compensate for the absence of the troops from the main area of operations, and for the risk of defeat in detail; since a detachment may be unable to rejoin the main force in time to take part in a decisive action, or may itself experience disaster. That some benefit will be obtained can always be urged in favour of proposals for detachments. But the decision should depend on whether the enemy will be obliged to lay out a larger proportion of

his forces in meeting them than is involved in making them; and whether their success will be more advantageous for the general cause than their failure or negative result will be mischievous—in fact, whether they are likely to prejudice or assist in the attainment of the main objective.

If no definite advantage can be gained, a detachment should not be made; and at all costs influences should be resisted which are sure to demand the despatch of forces to this or that quarter in the false belief that such dispersion will give security, or that decisive results can be attained by doing many things at once. Further, as pointed out by Windham, the most fatal error is to make detachments “to preserve the popularity of the war by feeding the avarice of the nation with conquests.”

Owing, for instance, to numerous detachments to other theatres the British force sent to Walcheren in 1809 was not strong enough to effect really important results (p. 50). Another example of unprofitable detachment is that of the 18,000 men kept by Wellington at Hal during the battle of Waterloo, on the 18th June, 1815, apparently with the object of meeting an advance from this quarter against his line of communication with Ostende. These men would have been far more valuable on the field of Waterloo. The operations of the 8000 men sent under Whitelocke to Buenos Ayres, in 1807, could in no way have affected the result of the war with France, and seem only to have been undertaken for the purpose of making conquests (p. 269). The detachment, for the protection of Washington, of the 1st Corps, 30,000–40,000 men, from the army sent in 1862 under McClellan against Richmond was also disadvantageous. McClellan's plans were upset, his forces weakened and in the end beaten, while the actual security of Washington was not assured (p. 24).

Examples
of harm-
ful de-
tach-
ments

REASONS FOR DETACHING.

Territory, then, will usually be best secured by the pressure of the field force on the enemy's principal army. Unless the main army is covering its own country, troops in addition to those under training as drafts for the forces in the field, may, however, be required for its protection. Such detachments may be wanted when, as was the case in the

Seven Years' War, England, a weaker power on land, was engaged with a great military power, like France, which had also a considerable fleet. In this case the risk of invasion could not be obviated by indirect pressure so long as the enemy's fleet was unbeaten. Or they may be made when it is desired, in spite of the military risks that are incurred, to give the sense of security which is afforded by the presence of troops to the nation as a whole, or to some important mercantile community. They may also sometimes be necessary to maintain order; and to act as a deterrent to or to parry minor hostile enterprises which might otherwise prejudice the success of the campaign by causing the government hastily to recall men from the front, as did the English in 1708 (p. 23).

Troops must, as a rule, be detached to secure oversea possessions such as the Straits Settlements and India; to safeguard the bases and lines of communication; to prevent the occupation of such important localities as landing places on the coast, mountain passes, passages over rivers, railway bridges, road and railway centres; and at times detachments may be made to delay the movements of the enemy. A force may also be detached from the main army to gain a political advantage; to stir up or support insurrection; to operate in a subsidiary theatre or against the less important members of a coalition; to harass the enemy's territory; to carry out a siege; to operate against the hostile flanks or communications; or for purposes of reconnaissance.

Again, a detachment may be made to contain the enemy's troops while the main body moves round and turns his position; to hold fast a portion of his force whilst the bulk of the army attacks the remainder; and as a diversion to mislead the enemy, and force him to make larger detachments or to abandon or modify his plans.

DETACHMENTS TO SECURE TERRITORY AND COMMUNICATIONS.

Garrisons must be maintained in oversea naval bases like Malta, or Hong Kong, since without them the shipping in these places would be at the mercy of a single raiding cruiser or submarine. (Map 1.) They are also occasionally placed for political reasons in an area not long occupied,

and therefore not completely absorbed, which may be entered by the enemy to stir up disaffection. Thus even during the Indian Mutiny a detachment was retained in Peshawar, although concentration of troops at Delhi was of vital importance.

Detachments to guard the lines of communication are usually inevitable, but should be kept as low as possible, otherwise while the line of communication is secured the field army may be so depleted as to be in danger of defeat.

In the second Afghan War, for instance, the force holding Kabul under Lord Roberts amounted, towards the end of December 1879, to about 7000 men only, while between 12,000 and 13,000 were required to guard the line of communication from Kabul to Peshawar against the depredations and attacks of the neighbouring tribesmen. As a result Lord Roberts was obliged to concentrate his troops in the fortified cantonment at Sherpur, a few miles from Kabul, where he was attacked by the Afghans, who were, however, defeated on the 23rd December. (Map on p. III.)

DETACHMENTS AT OBSTACLES.

As has been pointed out detachments to secure the passages over rivers and other obstacles will often be made when the strategical defensive is adopted. Their principal duty will be to give an exaggerated impression of their own strength; to obtain with the least hazard information as to the strength of the enemy, to delay his operations, and to secure freedom of action for the main body of their own army. These clearly are tasks of great difficulty, and even small errors of judgment may involve a detachment in disaster and compromise the main army.

The detachments made by Napoleon in 1796 (p. 145), by Wellington in 1810 (p. 97), and by the Austrians in 1866 in Italy (p. 231), illustrate the successful application of these principles. Mack's disaster at Ulm in 1805 (p. 137), and the defeat of the detachments made by the Austrians in 1866 in Bohemia (p. 238), and by the Russians to the Yalu in 1904 (p. 218), show the difficulties and dangers of this policy.

DETACHMENTS FOR POLITICAL REASONS.

Reference has already been made to the influence exercised on strategy by non-military considerations (p. 11). This aspect of the direction of war is further illustrated by the following examples.

Wellington in
1814

In 1814 a British force was sent under Beresford to Bordeaux partly for political reasons. After his defeat at Orthes at the end of February, 1814, Soult retired up the Adour towards Marsiac and Maubourget, the Allies halting near Barcelonne and Aire, astride the Adour. (Map 10 on p. 226.)

Wellington now observed that his left flank and rear were exposed to attack by French forces which might be raised in the valley of the lower Garonne; and being aware that there was a party favourable to the Bourbons and hostile to Napoleon in Bordeaux, resolved to take advantage of this circumstance. Beresford was accordingly detached on the 8th March with the 4th and 7th Divisions and a cavalry brigade, about 12,000 men, to occupy Bordeaux, which could be used if necessary as a base by the Allies. If a revolt in favour of the Bourbons took place he was also to supply the French Royalists with arms, and in this manner to secure the left flank and rear of the allied army.

The Royalists, however, acted only in half-hearted fashion; while Soult, on learning of the detachment, which was believed to have reduced the allied army to about 30,000 men, that is to an equality with the French, resolved to take advantage of this circumstance and to attack.

Wellington, who meanwhile had been reinforced by 8000 Spaniards and a cavalry brigade, now hastily concentrated to oppose the French, recalling the 4th Division and the bulk of the cavalry from Bordeaux.

On the 13th March Soult advanced from Maubourget, but fell back again on the 16th on receiving information that Wellington had been reinforced. The troops from Bordeaux seem to have rejoined on the next day, and on the 18th the Allies resumed the offensive.

Lee in
1862

In 1862, the Confederate commander Lee detached Jackson to menace Washington, the Federal capital, the inviolability of which was of great political importance to the Federals. In this manner he endeavoured both to relieve

pressure against Richmond, the Confederate capital, and also to gain for the Confederates an opportunity of beating the Federals in detail. (Map on p. 221.)

In May the general situation was as follows. Of the Federals McClellan with about 100,000 men was advancing against Richmond from the Yorktown Peninsula, and McDowell with 40,000 was moving southwards from the direction of Fredericksburg to co-operate with McClellan; Shields with 11,000 was near Manassas Junction, 1000-2000 men were protecting the Manassas Gap railway, Banks had 9500 at Strasburg and Winchester, and 12,000 men were holding Washington. On the Confederate side Lee with 50,000 men was facing McClellan, 10,000 were opposite McDowell, and about 17,000 could be concentrated under Jackson in the Shenandoah Valley.

In these circumstances Lee resolved to strike a blow at Washington by sending Jackson down the Shenandoah Valley to Harper's Ferry.

"Few," writes Henderson, "would have seen the opportunity, or with a great army thundering at the gates of Richmond have dared to seize it... it was not McClellan and McDowell whom Lee was fighting, not the enormous hosts which they commanded nor the vast resources of the North...." The power which controlled them was the Northern President. "It was at Lincoln that Lee was about to strike, at Lincoln and the Northern people, and an effective blow at the point which people and President deemed vital might arrest the progress of their armies as surely as if the Confederates had been reinforced by 100,000 men."

The operation was completely successful (p. 224). McDowell's movement on Richmond was suspended, 20,000 men from his force were sent at once to the Shenandoah Valley, and the way was paved for the victory of the Confederates over McClellan in the Seven Days' battles outside Richmond.

The Anglo-French force despatched to Salonika in 1915 is a further instance of a detachment for a political purpose. Although at the time it was evident that little military advantage would result from an attempt to furnish direct assistance to the Serbians, public opinion in England and

Western
Powers
in 1915

France demanded the despatch of troops (p. 13). In 1918, after having been reinforced by a reconstituted Serbian force and by the Greek armies, the Allies gained a success near Monastir which resulted in the surrender of Bulgaria. In the end, therefore, some advantage was gained from this detachment of troops.

DETACHMENTS TO SUPPORT INSURRECTION.

In principle a force sent to foster or support a rising should be sufficiently strong to be sure of maintaining itself without assistance from those it is desired to uphold; and it is only in these circumstances that reliance can be placed on retaining the sympathy of the discontented factions, and success assured. To despatch a small force is generally to court failure, for the malcontents may either refuse to rise, as was the case with the Catalans, in 1704, who remained quiet when it was seen that only 5000 British and other troops had been sent to support them. Or they may desert the alien force as was done by the Armenians at Baku, in 1918, with results disastrous to the British detachment; and also by certain Russian troops who went over to the enemy near Archangel in 1919. The allotment for such a venture of a force of moderate size has the disadvantages inherent in all half measures. The detachment will not be strong enough to secure success without hearty support from the insurgent faction, but will still be sufficiently large to raise doubts as to the altruistic motives of the invaders. Lukewarm support at best, and at worst defection, is therefore to be anticipated. Further, there may be special difficulties in abandoning or curtailing the operations of such a detachment, as this will involve the desertion of those of the inhabitants who may have joined it. In 1216 the English barons, fearing the loss of their lives and property at the hands of King John, invited Louis, the eldest son of the King of France, to come to England and assume the sovereignty, and in May, accordingly, Louis landed at the head of an army. John's death in October caused a revulsion of feeling against the presence of the French, their adherents fell away, the French army was defeated at Lincoln, and the navy, which was bringing reinforcements, was beaten at Sandwich. As a result England was evacuated in 1217. The French armies sent in 1859 to

Italy to assist the Italians to recover Lombardy and Venetia from the Austrians were sufficiently powerful to insure success through their own action. As a result of the victory of Solferino Lombardy was ceded to France and handed over by the French to the Italians, in exchange for Savoy and Nice.

DETACHMENTS TO SUBSIDIARY THEATRES.

As has been pointed out, these detachments are characteristic of the majority of British wars (p. 47). Sometimes they have met with local success and have also influenced the final result of the war, as when the whole of the French possessions in India were captured, and the foundations of the British Empire in India securely laid with but little expenditure of force during the Seven Years' War. The conquest of Palestine, in 1918, also furnishes an illustration of a successful detachment in a minor theatre (p. 142).

At other times such detachments have met with partial success only, like the descents on St Malo and Cherbourg in the Seven Years' War, in 1758, which caused the French some loss and damage, and involved a permanent increase in their coast guards, but were also costly to the attacker. Often these detachments have failed to achieve their immediate as well as their ultimate object, as was the case with the allied forces sent to the Peninsula between 1704 and 1710, in the war of the Spanish Succession. These not only did not oblige the French to make more important detachments, but, in the end, were disastrously defeated.

Equally unsuccessful were two eccentric ventures in 1807, when England was engaged in her struggle with Napoleon. In one case a force of 5000 men was sent to Egypt, under Fraser, to assist the Mamelukes against Mehemet Ali, the Turkish viceroy; and even had their purpose been attained it is difficult to see how this would have affected the course of the war, except remotely, through setting up rulers hostile to the French, who were then allied with the Turks. After seizing Alexandria, in March, the British experienced two severe reverses in the delta of the Nile in which 1600 men were killed, wounded or captured; and they finally withdrew from the country in September, after obtaining the release of the prisoners. In July a force of 8000 men under Whitelocke was repulsed in an attempt to capture Buenos Ayres, the

possession of which could have no possible influence for good on the success of the British arms. As the result of a convention the British were again allowed to reembark on their ships. Montevideo, which had been taken earlier in the year, was also evacuated in consequence of this reverse.

DETACHMENTS TO OBLIGE THE ENEMY TO CONFORM.

These detachments will achieve their purpose only when made in sufficient force, and when some important interest or locality is menaced: otherwise the threat can be ignored, and if so the forces will have been wasted.

Belleisle
in 1761

During the Seven Years' War, in 1761, Pitt obtained information that the French were about to place a large force in the field which would greatly outnumber the Anglo-German troops operating in north-west Germany under Prince Ferdinand of Brunswick. It was, therefore, resolved to disturb the preparations of the French by an attack on the island of Belleisle, situated outside the Basque naval roadstead, which would serve as a base for raids into French territory, and would also be valuable should war, as seemed not unlikely, break out with Spain. Belleisle was captured in May by a force of 9000 men; and as a result the preparations of the French were hampered and a force of twenty-two battalions and eight squadrons was sent to secure Brittany. (Map 2.)

Wellington
in
1811

In 1811, in the campaign in Southern Portugal, Wellington also employed the expedient of using a detachment to force the enemy to make larger detachments and to modify his plans. (Map 2.) In June the French brought up two armies under Soult and Marmont, each about 30,000 strong, to force Wellington who was investing the place to raise the siege of Badajos. Wellington consequently fell back behind the Guadiana, occupying a position in the vicinity of Elvas with 45,000 men. At the same time 10,000 Spaniards under Blake were sent on the 17th into Andalusia, whence Soult had advanced. Here they were to raise the inhabitants and to menace Seville and other places now practically denuded of French troops, every available man having been concentrated for the relief of Badajos. Such serious news from Andalusia reached Soult on the 24th that he felt obliged to

return to Seville with 15,000 men, while Marmont withdrew, without having risked a battle, about three weeks later.

In 1916, after the British withdrawal from Gallipoli, the ^{Germans in 1916} Germans and Turks made preparations which seemed to indicate their intention of invading Egypt; and as a result the majority of the troops from the peninsula were sent to Egypt, and reinforcements were also moved there from other theatres. The bulk of these troops, amounting to about 170,000 fighting men, were retained in the country until the arrival of the hot weather, combined with the reverses of the Turks at the hands of the Russians in Armenia, rendered invasion unlikely.

On the other hand the French attack made on Newfound- ^{New-found-land, 1762} land in 1762 with a force of four warships and about 800 troops, which slipped through the British vessels blockading the French coast, was ineffective as a diversion. St Johns indeed was captured on the 20th June, and damage was done to the town and shipping to the amount of £1,000,000. But in September the British sent 1500 men to Newfoundland; and these captured the French troops, although the war vessels again succeeded in evading the British squadrons.

DETACHMENTS TO EVICT, HOLD FAST, OR DELAY THE ENEMY.

Detachments to march round the enemy's flanks or against his communications will usually be made when in possession of superiority of force; when the enemy is apathetic or demoralized; or when he is strongly posted and it is desired to dislodge him, but it is inadvisable or impracticable for the whole army to turn the position. In the last case the expedient should not be repeated too often, for fear that the troops may be led to believe that the main business of war is to manœuvre, not to fight battles.

When a detachment is to be sent round the hostile flank it will, as has been pointed out, be advantageous if the physical features of the district can be used to screen or protect the operations of the troops. The movements of the force should be swift and secret, and if success is to be attained the co-operation of the main army should be assured.

Detach-
ments
around the
enemy's
flank ex-
plained

Examples of the successful use of such detachments are that made by Cromwell when operating against Leslie in July 1651 (p. 165); Graham's force in 1813, by means of which Wellington dislodged King Joseph from Burgos and the line of the Ebro (p. 169); Thackwell's detachment sent by Gough in 1848 to turn the Sikh position at Ramnugger (p. 236), and Maude's employment of the 3rd corps in the operations against Kut-el-Amara in 1917 (p. 170). On the other hand, the main body of the Sikh army failed to co-operate with the detachment made by the Sikhs to Ludhiana, and the consequences were disastrous; and in 1780 Gates and Sumter were both defeated (pp. 173 and 174).

The application of this method on a large scale was also responsible for the attack by the British on Gallipoli, and by the German submarines on the maritime communications of the Western Powers in the Great War (p. 174).

Detach-
ments to
contain
the enemy

When a detachment is left to contain the enemy and to cover a turning movement by the rest of the army, its operations should be such as will insure that the enemy may be held fast. Its strength and position should also be such as to minimize the risk of defeat in detail should the enemy attack before the pressure of the remainder of the force becomes effective.

British
in 1900

Lord Roberts, in 1900, successfully detached a force under Lord Methuen to mislead Cronje as to the operations which had been undertaken by the main army (p. 153).

The same policy was also followed, but without such happy results, by Sir R. Buller during the operations in Natal in 1899 and 1900. The Boers, who mustered about 24,000 fighting men, had, as has been shown, succeeded in investing a British force of some 12,000 in Ladysmith (p. 199). On the advance of a relieving army under Sir R. Buller the main body of the Boers moved southwards to a position on the heights lying north of the Tugela so as to cover the siege operations; and here the British were repulsed at the battle of Colenso on the 15th December, 1899. Having received a reinforcement which raised his strength to 25,000 Buller determined to keep a small containing force at Chieveley while with the remainder he marched westwards sixteen miles up the Tugela to turn the enemy's position

from the direction of Springfield. Leaving behind the 6th infantry brigade, some 3000 bayonets, Buller accordingly moved off with the remainder on the 10th January. The ground to the south of the Tugela was, however, to a great extent overlooked from the north of the river. As a result the operations of the detachment held fast only some 3000 Boers at Colenso, and the remainder followed a direction parallel to that taken by the British, who were again repulsed at Spion Kop and Vaal Krantz. (Map on p. 200.)

The plan of making detachments for the purpose of engaging and holding portions of the enemy's forces, while the remainder are attacked by the bulk of the army, was adopted by Napoleon in 1814 (p. 228). Other examples of detachments to delay

Junot, also, used a detachment under Laborde in 1808, prior to the battle of Vimiero, to delay the advance of the British and gain time for concentration of force to oppose them; and in 1904 the Russians moved a detachment to the Yalu with the object of delaying the advance of the Japanese (p. 218).

DETACHMENTS TO RECONNOITRE OR RAID.

A general who detaches a force of any considerable size to reconnoitre or to raid runs grave risk of defeat in detail, and stands "to win pence and to lose pounds." A reconnoitring detachment may easily become involved in a decisive action which may result not only in its own defeat but in the serious weakening of the army. Moreover, if the enemy hears of and takes advantage of the opportunity afforded by the absence of the troops to deliver an attack, or if he attacks without knowledge of the detachment, the advantage will be on his side. It is said that the absence of the Turkish cavalry on a raiding expedition was one of the causes of the Turkish defeat in September, 1915, near Kut-el-Amara, for Townshend was consequently able to turn and envelop the enemy's left flank (p. 173).

In 1915 the Turks undertook what was described as a reconnaissance of the British forces guarding the Suez Canal. The British had at this juncture a garrison of about 20,000 men in Egypt, a large proportion of whom were holding the line of the canal. Towards the middle of January information was obtained that a force of Turks was about to advance

against the British from the direction of El Arish; and it was afterwards ascertained that the Turks intended to deliver simultaneous attacks on Suez, Shaluf, Ismailia, El Ferdan and Kantara, and at the same time to attempt to cross the canal at Toussoum. (Map 6 on p. 144.) After some minor operations at Ismailia, the enemy to the strength of about 15,000 men engaged the British at Ismailia, El Ferdan and Kantara on the 3rd February, while a more serious attack was, as had been expected, made at Toussoum. The attempt was easily repulsed, whereupon the Turks withdrew towards El Arish, and the only result of the enterprise was to increase the confidence of the British troops, and reduce that of the Turks.

DETACHMENTS AGAINST FORTRESSES.

An example of a detachment for the purpose of carrying on a siege is that made by Wellington, in 1814, when he was obliged to leave 28,000 men, out of a total of about 100,000, to blockade Bayonne and its garrison of 10,000, before advancing into France. Von Moltke, as has been stated, detached 200,000 men in 1870 for the investment of Metz, which held about 175,000 French soldiers, and in 1915 the Russians devoted 100,000 men to the investment of Przemyśl, garrisoned by about 150,000.

CHAPTER VIII

THE TIME FACTOR.

"How true it is," wrote Wellington, "that in all military operations time is everything."

The influence of the time factor in war may be considered under several headings. There is, for example, the importance attaching to the timely commencement of war and to its timely conclusion, which has already been referred to (pp. 33 and 41). And there is the problem, which has been mentioned in connection with the framing of a plan of campaign (p. 93), as to the time required for the effective employment of the resources that can be made available. The policy adopted by a commander in the field will, as a rule, also be governed largely by considerations as to the time required and available for the successful completion of an undertaking before changes, due to the measures of the enemy, or arrival of enemy reinforcements, can supervene in the military and political situation.

If time is no object, if there is no prospect of outside interference nor of any alteration in the military situation, which, however, will rarely be the case, a commander can complete at his leisure preparations or manœuvres calculated to insure success. Otherwise, the advantages to be obtained from immediate action, by which time is gained and a decision is forced, must usually be weighed against those likely to be obtained from operations undertaken with the object of gaining time by postponing the crisis; for in war, at any rate, time is a thing that is seldom *given*.

Speaking generally, the policy of the stronger side will be to take such steps as will precipitate a crisis, and therefore enable its superiority to be used to the fullest extent. Immediate action is also the wisest course when dealing with revolts or incursions by native tribes. "By these," wrote Kaye, "delay is held to be a sign of weakness. It encourages enmity and confirms vacillation.... On the other hand, the native mind is readily convinced by the inexorable logic of the sword. There is no appeal from such arbitration."

Conversely procrastination will often be adopted by the weaker, or less well-prepared army, since "delay," as observed by Sir J. Mackintosh, "is commonly in the interest of the power which is on the defensive. As long as delay lasts it answers the purpose of victory, which, in this case, is only preservation. It wears out the spirit of enterprise necessary for assailants, especially such as embark in very distant and perilous attempts. It familiarises those who are to be attacked with the danger, and allows time for the first panic to subside. It affords a chance that circumstances may become more favourable, and to those who have nothing else in their favour it leaves at least the chapter of accidents."

On the other hand it may be good policy for the weaker side, if its forces are better prepared or more concentrated, to make a timely attack on the enemy with the object of obtaining success before his power can be developed.

Examples
of value
of en-
deavours
to gain
time by
action

Napoleon's attempt to use his superior armies to force a decision in 1809 in Spain is an example of the value of time to the stronger side (p. 196). Had the Emperor been successful in capturing or annihilating the main Spanish force time would not have been allowed to the Spaniards to rally nor to the English to furnish assistance.

The Germans also endeavoured in 1914 to take advantage of their superior readiness, by pursuing the forcing policy which had successfully and rapidly brought to a close the wars against the Austrians in 1866, and the French in 1870-71. The time required for the mobilization and effective action of the Russian armies was, however, miscalculated, and the German armies proved to be insufficiently powerful decisively to beat those of the French and British.

At the beginning of the Crimean War Lord Raglan, the British commander-in-chief, wrote to Admiral Dundas at the time of the first bombardment of Sebastopol in October, 1854: "We are in the middle of October. The fine weather which we have been so fortunate to enjoy... can hardly be expected to last much longer, and large reinforcements are moving from the northward to the assistance of Prince Mentschikoff. Time, therefore, is most precious, and we have not much left to capture the place...." The Allies had, however,

already wasted too much time (p. 62), the attack failed and Sebastopol did not fall until September, 1855.

In 1918 the decisive factor in the war was whether the Germanic Powers could use the numerical superiority in trained troops which had resulted from the defection of the Russians from the Western Powers, to effect a crisis before the United States had time to raise and train the forces necessary to restore the balance; and also to transport them to Europe in face of the efforts of the German submarines to prevent their arrival. The Germans made three attacks on a large scale in the attempt to snatch a victory, and in the first two, which were undertaken in March and May, gained considerable successes. The third offensive in July failed, and by this time the Germans seem to have expended the bulk of their reserves, while, on the other hand, a large number of Americans had reached France. Having these to draw on in the future, Marshal Foch, the allied commander-in-chief, was able to assume the offensive, with the result that in November the Germans sued for an armistice.

At the commencement of the South African War delay was in the interest of Great Britain, who required time to develop resources and to enable reinforcements to reach the comparatively weak forces holding the British colonies (p. 109). Time
gained
by delay

The situation of Russia was somewhat similar at the commencement of the Russo-Japanese War. The bulk of her military and half her naval force was in Europe, whereas the Russian garrisons in the Far East amounted only to about 120,000 fighting men; and the Russian Eastern squadron possessed no advantage, even on paper, over the Japanese fleet. The Japanese, who quickly gained superiority over the Eastern squadron, could, however, with relative ease and rapidity deploy in Manchuria the whole of their land forces, which far outnumbered the Russian garrisons. (Map 1.)

During the war in the Peninsula, also, the policy of delay was at first advantageous for Great Britain. If the national resistance of the Spaniards and Portuguese against the French could be maintained with the support of British troops and subsidies, a large French force would be absorbed in Spain and Portugal. In these circumstances it was more than probable that other European nations, such as Austria and Prussia, which had previously been defeated by Napoleon,

would seize the opportunity to regain their former position and lost possessions.

The Germans and Austrians also adopted a procrastinating policy in the winter of 1914 and spring of 1915 in order to gain time for the provision of the artillery and ammunition necessary to enable the offensive to be undertaken successfully against the Russians.

In Scotland, in 1650, Leslie deliberately devastated the Lowlands, and retired before Cromwell to a strong position at Edinburgh (p. 154). Time was thus gained to allow the usual waste of war so far to reduce the enemy's strength as to enable the offensive to be undertaken.

Wellington acted on similar principles when, in 1810, he fell back to Torres Vedras (p. 97).

Time
gained by
seizing
the
initiative

The attacks delivered by the British against the Danes at Copenhagen in 1801 and 1807 furnish instances of an offensive by the weaker side with the object of preventing the concentration of superior force (p. 57). Napoleon also followed this policy in the Waterloo campaign, and attempted to defeat the Allies in detail by attacking the English, Prussians, Dutch and Belgians before the Austrians and Russians could intervene (p. 177).

In the Russo-Japanese War, although his army was inferior in numbers, Oyama attacked the Russians at Liao Yang, with the object of fighting a battle before the arrival of the large reinforcements known to be on their way to join the Russians.

Oppor-
tune and
ill-timed
measures

The value of time is also seen in the success of opportune measures—which is often due to the factor of surprise—and in the punishment which usually ensues from mistiming. It is evident that the prosperous issue or failure of a strategical plan will depend greatly on the timely delivery of the blow. If the operations are ill-timed, or if miscalculations are made and time is wasted, the enemy will be afforded an occasion of taking the force at a disadvantage and perhaps of defeating it in detail; or of meeting effectively or avoiding the attack.

Moore's advance in 1808 from Lisbon to Sahagun supplies an instance of a timely movement which disconcerted the plans of Napoleon for the conquest of Spain (p. 157); and

Wellington's attack on Soult's army at Oporto in the following year also largely owed success to its opportune delivery (p. 180).

The German conquest of Serbia in 1915 was well timed, for owing to the situation both on the Western and Russian fronts, and the difficulties that must be overcome in transporting troops overseas to Serbia, it was unlikely that their allies would be able to give the Serbians effective aid either directly or by indirect measures (p. 200).

In 1805 the Austrians miscalculated the rapidity of Napoleon's movements, and paid the penalty in the disaster at Ulm (p. 138). The operations which resulted in the investment of the British in Kut-el-Amara in 1915 also exemplify the miscalculation of the time required for the concentration of superior numbers by the enemy. It was considered that Townshend's force of about 12,000 men would suffice for the capture of Baghdad, whereas the Turks were able to bring between 30,000 and 40,000 men against the British.

The landing at Gallipoli in 1915 was ill-timed, for owing to the previous efforts of the allied fleets to force the passage of the Dardanelles the Turks had received ample warning of the intentions of the Western Powers, and had been able strongly to fortify and garrison the peninsula (p. 74).

The failure of the German offensive in July, 1918, was probably due to mistiming, and the Western Powers consequently were able to meet and repulse the enemy's attack. It was of this defeat that Hindenburg, the Chief of the German General Staff, is reported to have said that in war nothing more quickly brings its own punishment than overhaste.

Mistiming has also been the principal cause of failure in almost every unsuccessful operation involving combined action between two or more forces. Such, for instance, are the combinations of the French against Marlborough and Eugene in 1704 (p. 52); the operations of the Austrians for the relief of Mantua in 1796 (p. 145); the campaign against Wellington and Cuesta in 1809 (p. 180); Napoleon's Waterloo campaign in 1815 (p. 177); the attack on the Suez Canal in 1915 (p. 274).

THE EFFECT OF MOBILITY¹.

Success in war is rarely attained by passive measures, and a decision can be assured only when the enemy is driven or manœuvred into a disadvantageous situation and then finally defeated. Investment is at best a slow and, except in favourable circumstances, a doubtful expedient.

War, then, is essentially a business of transportation, and mobility, therefore, is an important factor in a victorious campaign. On the other hand the smallest movement in war requires much preparation and great effort.

The power of rapid movement is almost essential for successful strategy. A mobile army can, for instance, gain the initiative from an army which is less mobile, its movements can be anticipated, and it can be surprised and forced to give way or to fight at a disadvantage. A highly mobile force, in fact, enjoys advantages similar to those secured by the command of the sea, and within limits can "take as much or as little of war" as is desired. In addition, by conferring the power of outstripping the enemy and therefore perhaps of attacking him in detail, or by enabling the same troops to be employed in different localities, superior mobility will compensate for numerical inferiority.

An immobile army is like a bear chained up to be baited. It can be attacked from any and every direction, and so long as its enemies refrain from closing it is powerless against them, and cannot take advantage of the mistakes they may have committed.

NATURE OF MOBILITY.

Mobility is of two kinds. There is marching mobility, characterized by the self-propelled movement of troops and of their immediate animal transport; and mobility as regards transportation, which at present involves the movement of units and the requirements for their maintenance by sea, rail or mechanical transport.

MARCHING POWER.

Mobility and immobility are necessarily comparative terms as regards marching, for large armies can at best move but slowly. Even a single army corps of three British

¹See also Chapter V.

divisions marching along one road would extend for about fifty miles, that is, the head would be in London before the rear had left Brighton. It is evident, therefore, that to march an army of not more than half a dozen corps from one locality and effect its concentration for battle in another is a slow and difficult undertaking; and the power to effect more rapid movements than those of the enemy has consequently always been an index of great military capacity in a leader, and of sound organization and a high standard of efficiency in his troops.

This was one of Napoleon's qualifications; and after his rapid success in the Ulm campaign of 1805 it was current gossip in the French camps that "The little corporal has discovered a new method of carrying on war—he makes more use of our legs than our bayonets."

In 1806, at the commencement of the Jena campaign, Napoleon again took such full advantage of the mobility of his army, that the Duke of Brunswick, on receiving a report that the French were expected to reach Naumburg on the 12th October, is said scornfully to have remarked—"They can no more fly than we can."

The French troops in the Salamanca campaign also outmarched the Allies, enabling Marmont to retain the advantage gained in his earlier movements (p. 164).

In its retreat from Mons to the Marne in 1914 the British army of five divisions and a cavalry division covered about 140 miles as the crow flies, or about 200 miles by road, in thirteen days. In regard to this march a German writer asserts that he is unable to decide which is most worthy of admiration, the strenuous endeavours of the German 1st army to bring the British to a standstill and force them to fight; or the rapidity with which the British evaded the attempts of the enemy.

On the other hand the immobility of the Russians, who held a central position, prevented them from profiting by the dispersion of the Japanese during the period before the battle of Liao Yang in 1904, when their armies were advancing from the Yalu, Ta-ku-Shan and up the Liao-tung peninsula. (Map on p. 72.)

RAILWAY TRANSPORT.

Great as is the influence of marching power on success, comparative mobility as regards transportation by rail and mechanical transport is equally important; and it is the use of these which constitutes one of the principal factors that differentiate between modern methods of applying strategical principles and those practised in the eighteenth and nineteenth centuries.

Munitions and supplies can be carried over long distances by means of railways more rapidly and with greater certainty than is possible on roads; and the average speed of a railway train is much higher than that which can be attained by the best road transport loaded with an equal quantity of supplies or stores. For instance, about 300 open goods wagons of the pattern used on English railways can carry rations for 100,000 men and grain for 30,000 horses, at an average rate of fifteen miles per hour. The smooth working of railways is also less dependent on favourable weather than is that of road transport; but railways are more easily damaged and interrupted by the enemy than are roads, and larger detachments consequently are required for their security.

The use of railways, then, has enabled armies of such magnitude that they could not exist by any other means to be maintained in a theatre of war. Railways, moreover, have enabled armies to operate with success in desert and undeveloped regions where formerly large forces would have starved; and smaller bodies would have suffered defeat at the hands of the inhabitants, whose superior mobility enabled them for a short time to concentrate far greater force.

Troops can also be carried over long distances by rail in numbers and at a rate formerly undreamt of, and large forces therefore can readily be transported to a theatre of war, or moved from one area of operations to another. It is said that in the war of 1914-18 the Germans were able to transfer seven pairs of divisions per month over the 1200 miles separating their Russian from their Franco-Belgian front—that is, seven divisions from the Russian to the French front and an equal number from the French to

the Russian front, or fourteen divisions from one front to the other without exchange. Similarly, divisions could be sent from the British front in Artois to Italy, a distance of 850 miles, at the rate of about one division per week. (Map 2.)

The transport of large masses by train is, however, still a relatively slow process when the time required to load and unload rolling stock is considered, as well as the necessity for maintaining, in the interests of safety, a considerable distance between railway trains.

A division at British war establishments required, in 1914 for instance, about eighty-five British railway trains, consisting of some 2000 trucks and carriages; and it could be carried in about thirty-three of the trains, consisting of approximately 1700 vehicles, which were usually employed on the continent. Assuming that troop trains could be despatched at the rate of one train per hour, and that troops could entrain from three stations, a division could be entrained in the thirty-three continental trains in thirty-five hours, three hours being allowed for loading each train. From forty to forty-five railway trains are said to have been used for the transport of a German division over comparatively short distances; but from sixty to eighty trains were required when movement from France to Russia was in question. Between four and five days were spent in passing the smaller number of trains through a given station, and between six and eight days were required in the case of the larger number.

Troops may of course be moved much more expeditiously from place to place by rail without their transport than with it. Of the 2000 British railway vehicles required for a division nearly 1200 were for the artillery, and the ammunition columns and transport trains; and if these were sent by march route, only about thirty British trains, and twenty-two of the continental trains, would be needed for the remainder of the division. Six continental railway trains, each of fifty vehicles and carrying about 2000 men, could move the infantry of a division if unaccompanied even by first line transport.

When there is no immediate prospect of collision with the enemy, the aggregate rapidity, therefore, with which a division can be moved over a distance of about forty miles

cap, in present circumstances, be increased by railing the infantry and allowing the remaining troops to march.

It follows that troops and transport should only move together by rail when there is little or no danger of meeting the enemy; and that bodies of troops can march short distances, such as thirty to forty miles, more quickly than they can be moved by rail.

MECHANICAL TRANSPORT.

The introduction of mechanical transport, by means of which supplies, ammunition and stores can be rapidly conveyed from railheads to the troops, has also added to the numbers that can be maintained in the field as well as to the general mobility of armies. Owing to the great capacity and speed of the mechanical vehicles, not only can a reduction be made in the quantity of wheeled transport which formerly accompanied the troops and was used for the movement of their requirements, but an army supplied by mechanical transport can manoeuvre freely at a considerable distance from its railheads. The army, therefore, will not any longer, as was formerly the case, be definitely tied to the roads along which its wheeled transport has been working, since a change in the routes followed by the relatively small number of mechanical vehicles can easily be made. On the other hand mechanical transport quickly wears out roads, and unless a reliable cross-country vehicle can be produced, or the roads can be kept in good repair, the value of the transport will be much reduced.

Small forces of infantry, such as the infantry of a division, and of the other arms can also be quickly transported from place to place in large mechanical transport vehicles, or in omnibuses and even in the smaller cars.

So many vehicles would, however, be required for the transport of numbers of men, except in succession, that, unless of a cross-country type, the road space they would occupy would be prohibitive. Three hundred omnibuses, for instance, would be needed for the infantry of a division, and would occupy from six to eight miles of road space.

The maximum distance over which it is advantageous to move troops by mechanical transport may be taken as about forty miles, and the minimum as about fifteen miles unless

the mechanical transport is actually available at the time and place where the movement is ordered to commence.

The following are examples of the employment of mechanical vehicles for the movement of troops. In September 1914 a French division was sent in buses and taxis from Paris to the Ourcq, a distance of about thirty-five miles, to reinforce the French 6th Army at the crisis of the battle of the Marne; and the arrival of these troops helped to turn the scale against the Germans. On the 9th October, owing to the imminence of the fall of Antwerp, which would set free the German investing force, it was of importance rapidly to cover Calais. The infantry of the British 2nd Corps, which had been railed from the Aisne to the Somme, was therefore sent to the Franco-Belgian frontier in motor lorries. On the 21st two battalions were also despatched in omnibuses from St Omer, twenty miles southeast of Calais, to reinforce the British cavalry operating near Lille. (Map 12 on p. 252.)

THE INFLUENCE OF WEATHER, SEASONS, CLIMATE, ETC.

Weather necessarily exercises a considerable influence, bad as well as favourable, on strategical operations. The bad influence is seen both in its effects on the health of the troops, and in the limitations, unexpected and difficult to discount, that are imposed on the mobility of armies and are therefore prejudicial to strategical combinations. On the other hand, advantage is often taken of rain, snow or fog to effect a surprise, and drought or frost may favour operations in marshy and at other times impassable districts.

The unfavourable effects of weather may be produced through an especially hot day which may prejudice success by delaying the march of an army for many hours, and in this way upset the calculations and plans of a general. For instance, intense heat checked the movements of Sir Redvers Buller's troops after the battle of Monte Christo, in 1900, in Natal, and so gave the enemy an opportunity of fathoming his intention of turning their left flank.

Harmful
effect of
weather
on opera-
tions

In the same manner storm, rain, snow or fog may adversely influence the fate of a campaign for the attacking side. In the spring of 1744 a fleet of sixteen French battle-ships actually sailed as far as Dungeness to cover the passage of transports from Dunkirk containing an army of 15,000

men which were destined, under the command of Marshal Saxe, to make a descent upon England. It was then dispersed by a storm in which many of the transports as well as their escort of war vessels were wrecked in Dunkirk roads, and this put an effectual end to the enterprise.

Had it not been for a thunderstorm which stopped a night march of the British in Southern India in 1791, Cornwallis would have taken the Mysorean army completely by surprise. The thunderstorm on the afternoon of the 17th June, 1815, rendering the fields impassable, so far hindered the movements of the French army that the main body was not concentrated at Waterloo until early on the 18th. This may partly have accounted for the postponement until noon of the commencement of the battle. The Prussians were therefore given time to march from Wavre to the battlefield. On the 17th, also, rainy weather handicapped the French detachment sent under Grouchy to pursue the Prussians after their defeat at Ligny. (Map 7 on p. 178.)

Heavy rain, rendering the roads unfit for traffic, arrested Wellington's operations against Soult in Gascony during the winter of 1813-1814. As he wrote to Bathurst, "Some military operations are impossible, and one is to march in this country in the rainy season."

The fact that a heavy fall of rain would convert the desert area round Kut-el-Amara into a slippery swamp precluded wide enveloping movements during Maude's operations against the Turkish positions in 1917.

The effect of weather on the British and French operations near Ypres in the autumn of 1917 is described as follows. • "Despite the magnitude of his efforts, it was the immense natural difficulties, accentuated manifold by the abnormally wet weather, rather than the enemy's resistance, which limited our progress.... Time after time the practically beaten enemy was able to reorganize and relieve his men, and to bring up reinforcements behind the sea of mud which constituted his main protection."

A fog, by delaying the operations of the French, probably robbed Soult of victory during the first portion of his campaign against Wellington in the Pyrenees in 1813; and low visibility caused by fog enabled the German fleet to escape at the battle of Jutland in 1916.

A snowstorm seriously hindered the march of Japanese reinforcements during the Russian attack on Hei-kou-tai in Manchuria in 1905.

In campaigns, moreover, which are carried on or undertaken in winter, greater strain and suffering are imposed on the troops than at other seasons. The reduction in the hours of daylight available for movement in winter time is also sometimes a serious consideration when the object is to effect a surprise. Thus bad weather and short days much prejudiced the French General Bourbaki's operations against the Germans in the campaign on the Lisaine in 1871.

The most harmful influence exercised by weather in war is, however, in the effect produced on the health of the troops. This may either be directly affected, or indirectly injured, through the failure of crops, or the breakdown of means of transporting supplies. Effect of weather and climate on health

After the siege and capture, in 1415, of Harfleur, a port at the mouth of the Seine and near Havre, bad weather supervened, rendering sea transport precarious and causing an outbreak of dysentery amongst the victorious English. Henry V was consequently obliged to march, in October, with only 9000 men out of his original force of 30,000, from Harfleur to Calais, across the front of the very superior and unbeaten French forces. Though intercepted, he defeated 50,000 French at Agincourt.

Cromwell was forced to fall back to Dunbar in 1650, owing to the effect of inclement weather on the health of his army (p. 155).

In the British expedition to Walcheren in 1809 the troops suffered so much from fever produced by the marshes in and round the island, that this was one of the principal causes of the abandonment of the enterprise (p. 50).

During the British occupation of the point of the Gallipoli peninsula, in 1915, a severe storm occurred on the 27th November, in the course of which heavy rain fell for twelve hours, followed by frost and then by snowstorms, the disturbance lasting for three days. As a result some 200 men died of exposure, and no fewer than 10,000 were admitted to hospital. The effects produced by this storm, and the impossibility of providing adequate shelter for the troops, were

amongst the reasons which caused the British to evacuate the peninsula.

Apart from casualties in action there are said to have been 9000 men in hospital in one week in East Africa, in September 1916, or between one-fourth and one-fifth of the British force that was serving there; and between October and December from 12,000 to 15,000 patients were evacuated from the hospitals.

The following are some cases in which inclement weather has furthered the success of military operations.

In 1794 a severe frost which caused all rivers and canals to be covered with ice passable by troops enabled the French to overrun Holland. And the fact that the great Hun River was frozen in sufficient thickness to be passable by all arms enabled the Japanese to place their 3rd Army west of it, and separate from the other armies, both before and during the battle of Mukden in 1905, without losing the power of inter-communication.

The dry spring and early summer of 1918 facilitated the preparations of the Germans for their attacks on the British and French in March and May; and was also favourable for the movement forward of heavy guns, munitions and supplies during these battles. Further, the prevalence of low cloud in March enabled the Germans to mass their troops without being observed by the allied airmen, and owing to fog the Germans were able to approach the British lines without coming under fire.

In 1813 Wellington took advantage of the concealment afforded by a thunderstorm to move a portion of the force destined to gain the passage over the Bidassoa, close to the French position (p. 235).

THE IMPORTANCE OF GOOD INFORMATION.

A plan of campaign is not on a sound foundation unless based on the most exact information that is obtainable of the theatre of war; for on this information will depend not only the maintenance of the army but also the accuracy of the forecast as to the numbers that can be brought into the field by the enemy (p. 93). The elder Pitt, indeed, ascribed his success as War Minister

Military
advan-
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taken of
inclement
weather

Informa-
tion as to
geo-
graphical
factors

to "obtaining accurate information respecting the places he intended to attack."

Further, no plan or plans of operations can be carried out successfully unless the commander-in-chief and his subordinates are in constant communication and well informed as to the situation and requirements of their own forces. One of the greatest disadvantages, for instance, under which the French laboured in the war in the Peninsula was the difficulty of maintaining communication between the various forces, which was constantly interrupted owing to the hostility of the inhabitants. Napoleon's failure to keep close communication with the detachment under Grouchy in 1815 was also one of the causes of his ill success in the Waterloo campaign. In 1870 von Moltke, though not more than a dozen miles from the field, did not, until the 15th August, hear of the battle of Borny, which had been fought on the afternoon of the 14th; and measures which resulted in the envelopment of the French were consequently delayed.

Importance of information of our own forces

Information in regard to the enemy's actual strength, dispositions and movements, and also as to the quality and *moral* of his troops, is of equal importance.

Importance of information as to enemy

The ideal in war is to force the enemy to conform to one's movements and to abandon his own plans. A commander nevertheless runs grave risks who advances into a hostile country without securing himself from surprise by using all available means not only to obtain information as to the enemy's position and movements, but also to test its accuracy and that of inferences made in regard to the enemy's probable dispositions.

It is, however, an advantage possessed by the attacker, that he may, if a right impulse is given to his army, and if the operations are prosecuted with energy, win a campaign through the errors of his opponents, but without possessing exact information as to their dispositions and movements. In the Eylau campaign of 1807, for instance, Napoleon was by no means well informed as to the movements of the Russians and Prussians, but—says von der Goltz—"He managed to attain his objects without having any clear and complete ideas in regard to the enemy's position and grouping."

If not absolutely necessary for success when attacking,

information in regard to the enemy is at any rate essential to a commander who is acting on the defensive; since the defender relies for success on ability to interrupt the plans or to take advantage of the mistakes of the attacker, exact news of whose movements is therefore requisite.

It may be accepted, then, as a general principle, that if a sound plan vigorously executed is the foundation, good information is the keystone of military success, for a commander who bases his operations on conjecture relies on chance to a dangerous extent.

Some of the greatest difficulties of war, however, are the obstacles to be overcome before accurate intelligence is gained, since the enemy will do all in his power to prevent the acquisition of information which is reliable, or to mislead us by false reports, feints and similar devices.

Consequently, every effort should be made not only to obtain reliable information of the enemy's dispositions, intentions and movements, but—what is of equal importance—to secure its rapid and certain transmission; for it is evident that information is only advantageous when it reaches those who can make use of it, and when its arrival is timely.

At the same time it is to be remembered that good and reliable information are relative terms, for the situation in war is rarely, if ever, clear, and there is and always must be an element of doubt regarding the actions of the opponent.

In 1805, for instance, when Villeneuve's French squadron began the operations which were to end at Trafalgar, by evading Nelson's blockading fleet and sailing for the West Indies, it was at first supposed that he had made for Egypt. Lord French was not aware until the day before the action at Mons, in 1914, that he was opposed by an overwhelming force of Germans. The allied attack on the Germans in the area between Château Thierry and Soissons, on the 18th July, 1918, was a surprise to the enemy (p. 202).

Aircraft perhaps afford the most reliable means of obtaining and transmitting with rapidity exact information regarding the enemy's movements. Experience has, however, shown that information gained in moments of hurry, excitement and danger by reliable eyewitnesses is apt to be untrustworthy, and the evidence even of photographs may be misinterpreted. It follows, therefore, that the reports of

airmen, like those obtained from other sources, must be checked and tested by intelligence obtained through different channels, such as secret service agents, spies, prisoners of war, newspaper reports, staff and other officers, and mounted troops.

To mislead the enemy is also clearly of importance, and one of the best means of doing so is to prevent him from gaining information. It is therefore necessary both to conceal the position and movements of troops, to insure the destruction of papers and manuscripts not actually required for current use or to be retained for purposes of record; and to prevent officers and men from giving inadvertently and in conversation or correspondence information of value to the enemy.

Necessity
of pre-
venting
enemy
from ac-
quiring
informa-
tion

Strict censorship is also required, if leakage of information through the press is to be prevented. Even before the invention of the telegraph the Duke of Wellington was obliged to write on this subject to the Government. "I beg to draw your Lordship's attention to the frequent paragraphs in the English newspapers describing the position, the numbers, the objects, and the means of attaining them, possessed by the armies in Spain and Portugal.... It is not necessary to enquire in what manner the newspapers acquire this description of information, but if the editors really feel an anxiety for the success of the military operations in the Peninsula, they will refrain from giving this information to the public, as they must know that their papers are read by the enemy, and that the information which they are desirous of conveying to their English readers is mischievous to the public, exactly in proportion as it is well founded and correct."

Prior to the battle of Trafalgar in 1805 it was of great importance to prevent news of the despatch of Nelson with reinforcements from reaching the commander of the French and Spanish fleets lying at Cadiz; who had decided not to leave this port unless the Allies had reason to believe themselves stronger by one-third than the British. "In the public measures of this country," writes Southey, "secrecy is seldom practicable and seldom attempted: here, however, by the precautions of Nelson and the wise measures of the Admiralty, the enemy were for once kept in ignorance; for, as the ships appointed to reinforce the Mediterranean fleet

were despatched singly—each as soon as it was ready—their collected number was not stated in the newspapers, and their arrival was not known to the enemy.”

Difficulty of obtaining information illustrated Many examples may be quoted of the difficulty of obtaining accurate information in war, in spite of the indiscretions of the press and private individuals, and of the various other sources of leakage and means of gaining news as to the enemy.

In the American Civil War, during the advance of Jackson on Harper's Ferry, in 1862, his force, actually less than 17,000 strong, was believed by the Federals to number from 30,000 to 60,000 men (p. 267).

In 1870 the French possessed on the whole good information of the dispositions of the Germans, but could not act on this news, because cavalry were not employed to confirm and check the intelligence reports.

Early in November 1870 it was estimated by the Headquarters Staff of the German armies, from information obtained from sources considered to be fairly reliable, that 60,000 French were at Le Mans, and that a body of equal strength was about to attack Orleans, which was held by the Germans. Actually the French forces in the neighbourhood of Le Mans were insignificant, while 100,000 French stood south of Orleans, and behind these were as many more. (Map 2.)

Before the battle of Te-li-ssu, in June, 1904, the reconnoitring detachments of the Russian commander, Stackelberg, failed to discover the presence of the 4th Japanese Division, part of which eventually enveloped the right of the Russians during the fight.

The employment of poison gas by the Germans in the second battle of Ypres in 1915 came as a surprise to the British and French; and the British employment of tanks in 1916 was an equal surprise to the Germans.

The withdrawal of the British from the Gallipoli peninsula was unexpected by the Turks, and was executed without interference.

Difficulty of discriminating as to information If to obtain and transmit information is no light task, to discriminate between what is false and true, valuable or the reverse, in the rumours and reports which come to hand, is far more difficult. The general tendency is to

interpret facts in accordance with our preconceived notions, and to see things as we desire them to appear and not as they are; and few commanders have possessed such correctness of judgment and intuition as never to be misled. Napoleon at first believed that at Jena he had defeated the bulk of the Prussian army, whereas more than half of it was engaged with Davoust's corps some miles away at Auerstädt. In the Franco-German War von Moltke refused for some time to credit reports of McMahon's advance with a French army to relieve Bazaine's force which had been shut up by the Germans in Metz, though news of the movement came from more than one reliable source.

Before the battle of the Sha Ho in the Manchurian War, in 1904, the Russian general Kuropatkin published to the world his intention of attacking the Japanese; yet Oyama, the Japanese commander, seems to have thought that the order was intended as a ruse, and was not altogether prepared for the Russian advance.

In 1915, prior to the advance of General Townshend's British force of 12,000 from Kut-el-Amara against Baghdad, the strength of the Turkish army covering this city was estimated at about 13,000. Immediately after the action at Ctesiphon, on the 22nd November, the Turks received large reinforcements, and on the 25th Townshend was forced to retire to avoid envelopment, and eventually was invested at Kut-el-Amara on the 7th December. Four days before the battle of Ctesiphon General Nixon, the commander-in-chief in Mesopotamia, was warned by the British War Office that 30,000 Turks were moving from Asia Minor to Mesopotamia; but he replied "At present I do not accept these reports as conclusive for various reasons." Actually they were correct.

INTERCOMMUNICATION.

It has been pointed out how largely the value of information depends on the means available for its rapid and certain transmission, and without information war would become merely a struggle in the dark. The larger the forces the greater is the importance of information, since movements once undertaken cannot readily be modified or varied; and the greater also are the difficulties of intercommunication. It is claimed that one of the reasons for Napoleon's failures in

1812-13 was that the size of his armies had outgrown the means of intercommunication then available; and the same excuse has been advanced for the defeat of the Germans in 1914. It may indeed be said that, as with railroads, the development of telegraph and telephone is one of the most important factors in enabling large armies to be controlled. The wider the frontage of operations, the more important does intercommunication become; for it is by co-ordination of effort that success is generally attained, and co-ordination is not possible without intercommunication.

The activities of war are, however, no longer confined to the theatres of operations; and free and rapid intercommunication within an empire as well as between allied states is necessary for proper co-operation, and in order that all resources may be used to the best advantage. Again, it is important to possess means of rapid communication with neutrals, with whom trade may be continued, public opinion influenced in our favour and from whom information may be obtained.

In some respects the British enjoyed the advantages of well-developed intercommunication in 1914, for the British Dominions and Dependencies were as a rule linked with Great Britain by British cables. Communication was therefore assured, and co-operation facilitated in operations against German overseas possessions and warships. Further direct telegraphic communication was available between England, France, Italy and Greece; but in the case of Russia the situation was not so advantageous, as intercommunication could be carried out only through the neutral Scandinavian states, or via Japan and Siberia. The fact that the majority of the cables to America had their terminals in the territories of the Western Powers also enabled these to exercise a measure of control over the attempts of the Germans to communicate with their nationals in countries overseas, and to continue trading arrangements with them. The Central Powers were, however, in direct telegraphic communication, and they were connected with the Scandinavian countries. In addition communication with neutrals was kept up by means of wireless.

The perfection of means of intercommunication is not without disadvantages, for it cannot but tend to encourage

interference by superiors in the actions of subordinates, and reference by the latter to superior authority in regard to matters which they could and should decide for themselves.

The interference of Napoleon III in the command of the French troops in the Crimea has already been noticed (p. 15). Prior to the attack on the Mamelon fort at Sebastopol in June, 1855, he telegraphed to General Pélissier: "...I give you a positive order not to devote yourself to the siege before having invested the place..." and subsequently, "...I persist, then, in ordering you to make every effort to take the field." This drew the reply from Pélissier, "In this situation the complete execution of your orders is impossible. It is to place me, Sire, between insubordination and discredit."

Inter-
ference in
opera-
tions or
reference
to su-
periors

On the 27th August, 1870, McMahon, whose army had been sent to attempt the relief of that of Bazaine which had, as has been stated, been shut up in Metz, telegraphed to the French War Minister announcing his intention of abandoning the project. Next day the Minister replied that the abandonment of Bazaine would cause a revolution in Paris; and as a result of this communication McMahon continued his operations, which ended in the surrender of his army at Sedan.

Prior to the Seven Days' battles near Richmond in 1862, General McClellan, the Federal commander, whose operations had been the subject of long correspondence with President Lincoln, telegraphed to Washington that if a disaster should result "the responsibility for it could not be thrown on his shoulders, but must rest where it belonged."

THE MORAL FACTORS.

It is a principle of strategy that, subject to the possibility of supplying the troops with food and munitions and of maintaining intercommunication, no army can ever be too strong, and, therefore, that every available man should be sent to the front.

Possession of numerical superiority does not, however, insure preponderance of force in war, for though "numbers alone can annihilate," and in consequence often react favourably on *moral*, relative *moral* is far more important than

numerical strength. It was, in fact, the opinion of Napoleon that the moral factors count as three-fourths, the material only as one-fourth.

Even at games such as cricket it is not uncommon for a team that has unexpectedly lost a few good wickets to become demoralized, to show form below its capacity; and this after all is only natural, since men who mistrust their abilities are already half beaten.

The same influences are at work on service, but since the stress of a campaign is far greater than that of a cricket match men more easily lose their self-esteem.

"In war," said Napoleon, "opinion is everything. There is not much difference after a battle in the material condition of the victor and vanquished, but the moral difference is immeasurably great." In 1813 he wrote to his brother Joseph—"The enemy are in a rare fright. A few days ago they thought I had no army; now their imagination has run away with them, and their estimates of 300,000 or 400,000 are thought to be below the mark. Not long ago they believed that my troops consisted of recruits; now they say that I have collected all my veterans, that my troops are picked men, and that the French armies are better than ever... You see what fear can do."

The influence of *moral* is also well illustrated in the campaign of 1811 in Portugal. In September Wellington was engaged in blockading with a force of 45,000 men the fortress of Ciudad Rodrigo which was held by the French. Towards the end of the month two French armies, each of about 30,000 men, were moved under Marmont and Dorsenne to the relief of the place. The French advanced with unexpected rapidity, and their main body closed with the allies, who were in extended cantonments, before their concentration could be completed. As a result Wellington was obliged to make a stand, on the 26th, with about 15,000 men at Fuente Guinaldo, where some entrenchments had been commenced, to cover the concentration of the remainder. Marmont and Dorsenne had meanwhile brought about 40,000 men to Fuente Guinaldo, but finding that Wellington was in an entrenched position did not dare to attack. (Map 8 on p. 196.) After three years' fighting and the reverses which had been experienced at the hands of Wellington at Vimiero, Tala-

vera, Bussaco and Fuentes D'Onoro when attacking British troops in position, the French hesitated to undertake such operations; and, as Dorsenne remarked, they believed that the position must be impregnable, since Wellington was offering battle. Thus Wellington utilized the moral superiority gained in earlier actions to extricate his army from a difficult situation. At the battle of the Nive, also, in 1813, he attacked the French "trusting to the influence of his reputation, to his previous victories, to the ascendancy of his troops in the field... and the result justified his boldness."

Moral is the product of good leadership, of success, of good organization, discipline and training, which inspire self-confidence; of religious or other enthusiasm, superior numbers, better armament, physical fitness, national character, racial pride, early teaching; and, indeed, of any factor which tends to give the leaders and troops confidence in themselves and in their power to defeat the enemy.

Of these factors the most important is leadership, for it is generally not so much force as its effective employment that is decisive in war.

Import-
ance of
leadership
illus-
trated

The power of gauging the psychological situation accurately is one of the most important attributes of leadership, and those commanders who can do so will alone be competent justly to estimate the measure of risk that may be accepted in any particular venture. Wellington, for instance, in the Vittoria campaign formed a low opinion of the military capacity of King Joseph; "he had seen his haste, his confusion, his trouble; and knowing well the moral power of rapidity and boldness in such circumstances had acted daringly indeed but wisely, for such daring is wisdom, it is the highest part of war." Similarly Frederick the Great generally found himself able to take liberties with his opponents when he had ascertained their characteristics.

Leadership, however, also exercises a direct influence on the troops. Soldiers still believe in a successful and mistrust an unfortunate leader; and, since faith is one of the most powerful forces at the disposal of humanity, men convinced that a thing will happen unconsciously influence the event. Their hearts receive "the conquering part to steel a strong opinion in themselves." His success, then, has usually been the highest claim of any general to the confidence and affec-

tion of his troops; and it is said that his soldiers loved Marlborough most on account of his endless triumphs.

Great commanders, however, have as a rule also been endowed with a personal magnetism compelling sympathy, and a tact in dealing with men which has won their affection; and since men instinctively try to imitate what they respect and admire, no great leader has ever failed to inspire his troops with some of his own characteristics. Of Caesar it is narrated that "such was the affection of his soldiers and their attachment to his person that they, who under other commanders were nothing above the common rate of men, became invincible where Caesar's glory was concerned, and met the most dreadful dangers with a courage that nothing could resist." Napoleon also possessed these attributes, and could successfully appeal to the pride and honour of his soldiers in bulletins and proclamations; and could also on occasion arouse their enthusiasm by rough familiarity, and their spirit of emulation by judicious praise and distribution of decorations. His presence in a campaign was therefore valued by the French as equal to that of 40,000 men. Nelson's sailors "obeyed him with alacrity and joy, because he possessed their confidence as well as their love." The sight of Wellington's "long nose" filled his troops with a confidence which was said "to be worth 10,000 men any day of the week."

Effect of
adminis-
tration on
moral
illus-
trated

Though the influence of a commander is most evident in his general direction of the strategy and tactics of a campaign, the organization and regulation of the administrative services of an army are of high importance from the moral point of view. If the men are ill-fed, badly lodged or encamped, or made to endure unnecessary discomfort, they soon lose health, and with it good spirits and self-confidence.

In 1809, after the battle of Talavera, the rank and file of the British army, who were half starved, rapidly deteriorated in discipline and spirit, while the news of the defeat of the Austrians at Wagram discouraged the officers. "With an army which a fortnight ago beat double their numbers," wrote Wellington on the 8th August, "I should now hesitate to meet a French corps of half their strength."

Other
factors
affecting
moral

Similarly, if a general needlessly overtaxes the physical powers of his troops, exhausting them without good reason, he lowers their *moral* and therefore their fighting value.

Napoleon, for instance, condemned Marmont's operations prior to the battle of Salamanca, on the ground that the long marches had taken too much out of the French troops without compensating advantages.

The effect of success on *moral* is illustrated by the influence of the victory of the British heavy cavalry brigade over the Russian cavalry at Balaclava, during the Crimean War. According to Kinglake there was hardly a Russian squadron which subsequently proved willing to hold its ground on the approach of the British horsemen.

It was said of the British soldiers who fought in 1917 in the battles near Ypres that "they advanced every time with absolute confidence in their power to overcome the enemy, even though they had sometimes to struggle through mud up to their waists to reach him."

The value of a weapon is in direct proportion to the skill and courage of the user, for it is the man rather than the arm that decides battles. The effect of superior armament on *moral*, however, was demonstrated in 1866, when the possession of a breech-loading rifle gave the Prussians the moral advantage and victory over the Austrians. Their possession of a large preponderance of heavy artillery also conferred considerable advantages on the Germans in 1914, and was responsible for their successes over the Russians in 1915. On the other hand the allied superiority in tanks, in 1918, is said to have depressed the German troops, and to have been one of the factors which led to the successes of the allied forces in France. In 1899 the demands of the British cavalry for a firearm more on an equality with the Mauser rifle, used by the Boers, than was the cavalry carbine showed how important is the question of armament. The insistence of British public opinion on the need for protection against air and sea raids, in 1917, indicates the moral effect that may be produced by these methods.

Of the purely mental factors which influence human action religious fervour is one of the most powerful. Enthusiasm strengthened the character and increased the courage, endurance and efficiency of the Crusaders and of the soldiers of Cromwell. And the effect of the Mahomedan religion on the spirit of the Saracens, who were "invincible in fact because they were invincible in opinion," enabled them

to conquer great tracts in Asia and Africa, and also to penetrate far into Europe. Patriotism is another great compelling force; and the patriotism of the Japanese, in 1904, leading the people to make great sacrifices with cheerfulness, was in marked contrast with the apathy of the Russians, in the Russo-Japanese War. The confidence inspired by discipline, cohesion and superior armament has also in all ages enabled trained and organized troops to make head against superior numbers of savages or levies.

Surprise is naturally a moral factor of considerable value, for troops surprised are troops thrown off their mental balance, and therefore for the moment probably incapable of coherent action and liable to defeat. The German gas offensive in April, 1915, was a complete surprise to the Allies; but fortunately the German infantry did not press the attack. When surprised the best remedy is at once to attack the enemy, as this will tend to restore confidence. Thus the Japanese commander, Oyama, when his army was somewhat unexpectedly attacked by the Russians at the battle of the Sha Ho in Manchuria in 1904, at once assumed the offensive and defeated them. Shortly after the British success at Cambrai in November, 1917, the Germans suddenly attacked the British positions south of this place. Advancing on the 30th, after a short bombardment, which was heavy enough to oblige the British to take cover without appearing to be the prelude of an attack, and covered by smoke shells and bombs, the enemy effected a surprise, and drove back the British forces in this quarter, amounting to about three divisions. At noon the enemy's advance was checked by local reserves, and a counter-attack by a division from reserve and other troops finally brought the Germans to a standstill.

Since *moral* is so essential to the attainment of success in war, a nation should use its best endeavours to foster and raise the *moral* of the troops. This may be done in part by insuring for the soldiers the most capable and well-educated leaders, and the most perfect organization, administration, armament and equipment; but it is of even greater importance to secure the support of popular opinion, and to foster, by means of national education, the qualities of honour, patriotism, self-control, honesty, conscientiousness, and tenacity of purpose, which count for so much in the struggle for existence (p. 27).

THE MANAGEMENT OF OPERATIONS.

Carlyle once wrote that "The English have a notion that Generalship is not wanted; that War is not an Art, as playing chess is, as finding the Longitude, and doing the Differential Calculus are (and a much deeper art than any of these); that War is taught by Nature, as eating is"; and it certainly seems that military difficulties, and especially those encountered in the management of operations, are seldom rightly estimated by public opinion.

An intimate acquaintance with the technicalities of war, such as the principles of strategy and battle tactics; the characteristics of the various arms, their powers and limitations; the arrangements for reconnaissance and protection; the problems of transportation, of maintenance and intercommunication, does not equip even the trained and experienced soldier with all the qualifications required in a good general; "and the battles won by lessons of tactics may be numbered with the epic poems created from the rules of criticism."

War, indeed, is not an exact science but an affair of calculation and judgment; and war can no more be made by text-book rule and formula than a picture can be painted.

On the other hand, military inspiration will not come except to those who possess the knowledge necessary as a medium for its production; and even inspiration is of little use unless backed by the moral force required to put its promptings into practice.

A commander in the field will be victorious only when he overrides and dominates the will of an opponent, with the mental and moral side of whose being he will be in continual conflict; and who will contrive to take advantage of opportunities to thwart his plans and to profit by his errors and weakness.

He must, in addition, secure the accomplishment of his projects by his own troops—human beings liable to sickness, to the influence of excitement, enthusiasm, depression, heat, cold, fatigue, hunger and thirst, jealousy, or fear; disposed to misinterpret his intentions and wishes, and above all possessing free wills, which a general who looks for success must guide, inspire and control.

It is stated, for instance, that Napoleon's failure in the campaign of 1813 in Germany was partly due to the

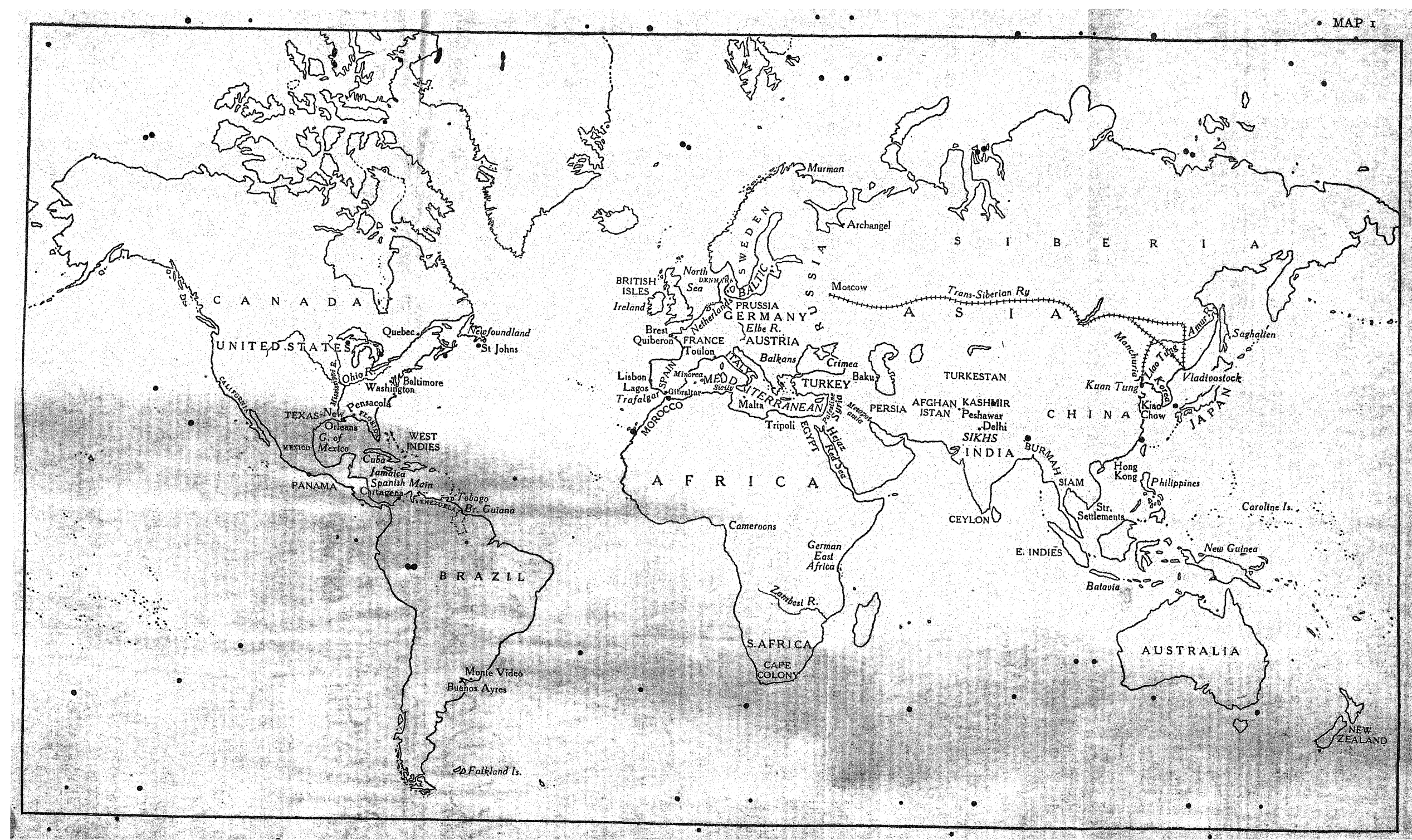
disobedience and insubordination of his Marshals, over whom his power had weakened owing to the disastrous conclusion of the expedition to Russia in the previous year.

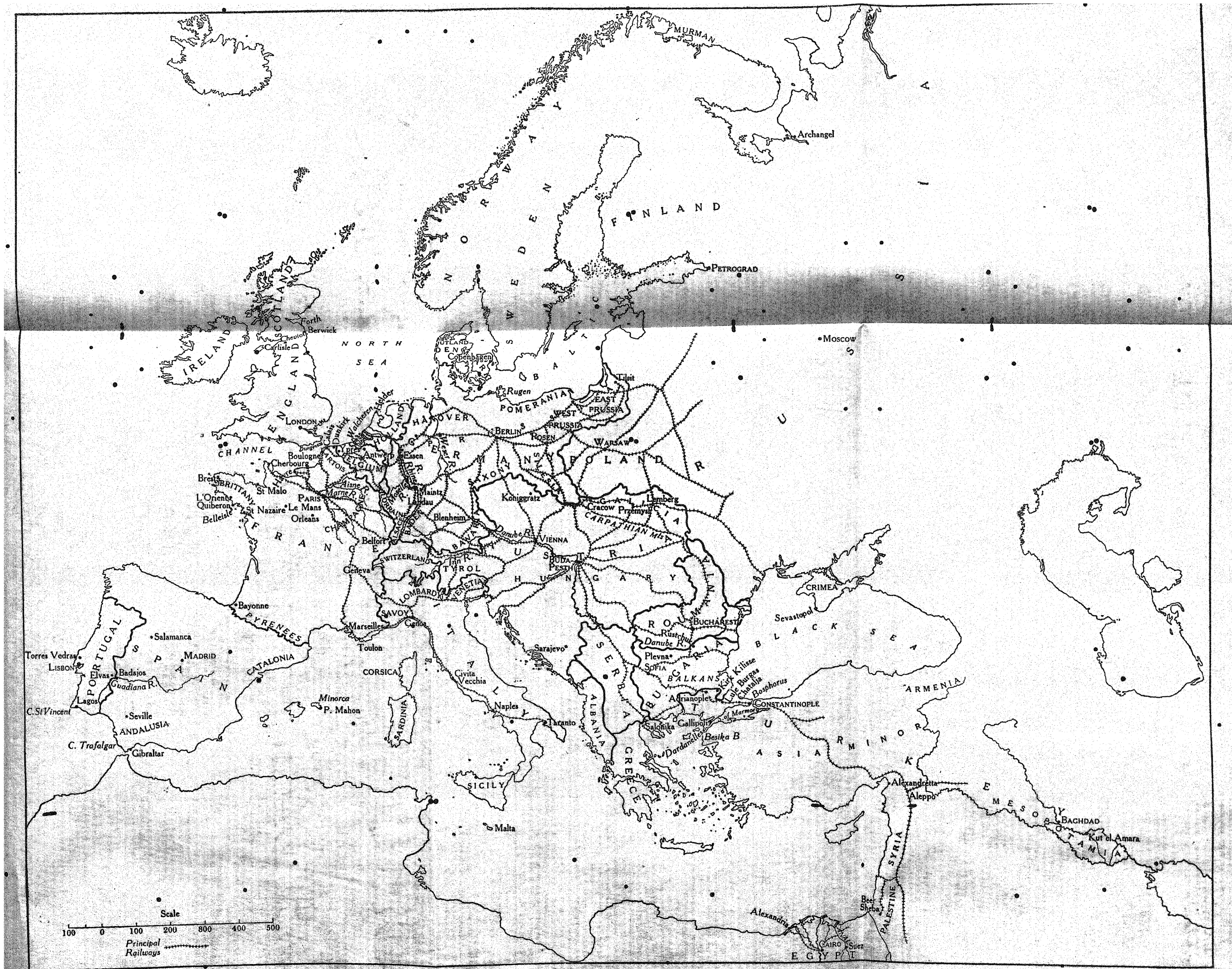
These factors do not, however, comprise even half the difficulty of war; for a commander, aware that he is not master of external events which may prejudice the success of his measures, that his plans are probably based on incorrect data, and knowing that everything is uncertain and that weather or chance may mar any project, is and must be a prey to anxiety; and this will not be lessened by the natural tendency to exaggerate his own difficulties and minimize those of his opponent.

To these influences the general must rise superior, in spite of physical and mental fatigue, which are the elements of war. He must, in face of both the physical opposition and the intellectual resistance of the enemy, possess the energy and determination to guide, direct, handle and drive what is the equivalent of a badly assembled human machine, the components of which can, with the best will in the world, work only with the greatest friction—a task no engineer would attempt. At the same time he must contrive to inspire his Government and fellow-countrymen with such confidence that he will be allowed to carry out his plans without interference.

To gain the confidence and good-will of his soldiers, which is the foundation of victory, the leader must be a man of resolute character never at a loss how to act, and possessing some of that personal magnetism which arouses affection. His mind must be stable, well balanced and fully developed by the study of war. It must be sufficiently subtle to devise plans to mislead the enemy, and so acute as in some degree to pierce the mist of doubt surrounding the operations of war. A general, further, must be competent to calculate chances, to weigh each situation on its merits, making due allowance for the various moral, material and technical factors, both as regards his own and the enemy's forces, which must be taken into account in every military operation; and, since in war there is rarely time for reflection, he must be able to pronounce rapid but valid judgments.

There are indeed but few men who possess the vigorous constitution, the intellectual ability, and the moral ascendancy characteristic of great commanders.





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